

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1222.—Vol. XXIX.

LONDON, SATURDAY, JANUARY 22, 1859.

(STAMPED.....SIXPENCE.  
UNSTAMPED.....FIVEPENCE.)

**MR. JAMES CROFTS, SHAREBROKER,**  
No. 1, FINCH LANE, CORNHILL (established 15 years), having resolved to extend his business, begs to intimate that he BUYS and SELLS every description of **BRITISH AND FOREIGN STOCKS AND SHARES, RAILWAYS, DOCKS, CANALS,** and other securities, particularly **BRITISH MINING SHARES**, in which dividends are paid regularly 15 to 20 per cent. per annum, with perfect freedom from any kind of risk; whilst (relative or progressive) shares frequently yield large and immediate profits, if well bought. Advice given to capitalists by letter, or personally.  
Mr. Crofts refers the readers of the Journal to his weekly review of the market, on page 65. The present moment presents peculiar opportunities for investments on a large scale.  
Office hours, Ten to Five.  
No. 1, Finch-lane, Cornhill, London, E.C.

**MR. JAMES LANE, No. 29, THREADNEEDLE STREET,**  
MINING SHARE DEALER.  
**JAMES B. BRENCHELY, of 19, TOKENHOUSE YARD,**  
LONDON, is a BUYER or SELLER in DIVIDEND and PROGRESSIVE MINES, for CASH. Bankers: London and Westminster.

**MR. LELEAN, 4, CUSHION COURT, OLD BROAD STREET,**  
will RESUME his WEEKLY LIST OF PRICES NEXT WEEK, as his health is entirely restored.

**DIVIDEND MINES**, well selected, are the BEST of all PUBLIC INVESTMENTS, paying, as they do (in dividends every two or three months), from 20 to 30 per cent. per annum. **NON-DIVIDEND MINES**, carefully chosen, frequently advance in price 500 per cent., or more.  
**PETER WATSON**, having 14 years' experience in every department of mining and its management, together with an extensive and regular correspondence with mining agents and others in Cornwall, Devon, and elsewhere, is enabled to judge of and select mines of intrinsic value.

**A SPECIAL REPORT (WEEKLY) WILL APPEAR IN**  
**PETER WATSON'S "MINING CIRCULAR,"** by his own Agents, ABRIDGED and condensed, and also given, and important information on the present and future operation, prospects of mines throughout Cornwall and Devon, with advice thereon as to purchase or sale of shares.  
Those who desire to have copies regularly sent them will be supplied for an annual subscription of £1 1s., or 6d. per copy.  
English and Foreign Stock, Share, and Mining Offices,  
3, Old Broad-street, London, E.C.

**MR. JOHN ANTHONY, MINING ENGINEER,**  
ESTIMATES AND SPECIFICATIONS FOR ALL KINDS OF  
MACHINERY PREPARED.  
11, ARUNDEL CRESCENT, PLYMOUTH.

**NOTICE.—MINING OFFICES, CORN EXCHANGE, LEEDS.**  
**JOHN GLEDHILL AND CO'S MINING OFFICES**  
are REMOVED from 12, South Parade to the CORN EXCHANGE. They beg to inform those who have money to invest that they have SEVERAL VALUABLE LEAD AND COPPER MINING SETTS on hand, which they have personally inspected, and can fully recommend. Some of these sets are situated in Yorkshire, Cumberland, Northumberland, and Scotland. Arrangements can be made to work them either by private enterprise or as public companies, under the Joint-Stock Companies Act (Limited), 1856. J. GLEDHILL and Co. will be glad to afford full information to bona fide parties respecting any of the above sets, and to assist in forming and establishing companies to work them, if after investigation it is thought desirable. They have also SHARES FOR SALE in many of the PROGRESSIVE and DIVIDEND MINES.

**MR. JOHN RISLEY, MINE SHAREBROKER,**  
JAMAICA COFFEE HOUSE, ST. MICHAEL'S ALLEY,  
CORNHILL, LONDON.  
Mr. J. RISLEY will be happy to furnish, on application, a List of Dividend and Progressive Mines worthy of special attention, two or three of the latter that may possibly rise 100 per cent. in market value within a few months. The present very cheering prospect of the two mines specially advocated the last nine months must be very pleasing to the shareholders—viz., East Basset and Pendean Consols.  
P.S.—References required with buying or selling orders.

**MONEY MARKET.—BRITISH AND FOREIGN FUNDS,**  
BANKS, INSURANCE, MINING AND RAILWAY SHAREHOLDERS, are respectfully informed that EVERY DESCRIPTION of STOCK and SHARES continue to be BOUGHT and SOLD, either for cash, or at the market price of the day, through the medium of the Stock Exchange, by Messrs. FULLER AND CO., No. 51, THREADNEEDLE STREET, LONDON, who have enlarged their premises, thereby affording every facility for giving the hourly current price of stocks, &c. Country communications have prompt attention, and every information given to parties seeking investments. British mining shares range from 12½ to 30 per cent. Others, of a progressive character, frequently advance in price from 50 to 100 per cent. upon the outlay. The present period offers to capitalists an opportunity which cannot fail to remunerate all who invest.  
Office hours, from Ten till Five o'clock, daily.  
Bankers: Sir J. W. Lubbock, Bart., Foster, and Co.

**FIFTEEN TO TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM**  
upon current value of shares, in CORNISH TIN and COPPER MINES.  
Dividends payable two-monthly or quarterly.

**MR. R. TREDINNICK, MINING ENGINEER, SENDS his**  
**SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES**  
upon receipt of a Fee of One Guinea.  
Reviews Cornish and Devon Mining Enterprises, 5s. per copy.  
Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret, South Canadon, and the Devon Great Consols Districts, 2s. 6d. each.  
Cornish Mines, well selected, pay better than any other description of securities, are free from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.  
Money advanced at 10 per cent. annually, for short or long periods, upon approved Mining Shares.—A. Austinfriars, Old Broad-street, London, E.C.

**MR. M. S. RICHARDS, BRITISH AND FOREIGN STOCK,**  
RAILWAY, AND MINING SHAREBROKER, No. 27, AUSTINFRIARS,  
LONDON, E.C., has the undermentioned MINING SHARES FOR DISPOSAL, or any part thereof, on Tuesday morning next, at the PRICES QUOTED:—  
1 S.W. Francis, £237½. 20 E. Providence, 10s. 9d. 25 Sortridge Cons., 15s. 6d.  
2 Providence. 10 Wheel Edward. 10 Calstock Cons., £1½.  
25 Great Harrow, 11s. 50 Gawton, 10s. 6d. 20 North Trelawny.  
20 Kelly Bray, £2½. 25 Wheel Arthur, 12s. 10 East Falmouth.  
50 Lady Bertha. 20 Wheel Wrey, £2½. 25 Wheel Sidney.  
10 East Russell. 20 Worthing. 25 Wheel Harriett.  
50 Hingston Down. 25 Taly Consols, 15s. 10 Tolcarne.  
50 Vale of Towy, 12s. 9d. 1 Old Tolgus. 10 Tolvaaden, £25½.  
20 No. Robert, £2 15s. 6d. 20 Trewatha, 16s. 6d. 20 Wheel Addams, 21s.

Mr. Richards, in introducing himself to the holders of stock of the above description, is particularly desirous to solicit a share of public patronage, and for so doing, he will be 1½ per cent. on all stock bought and sold up to 100l. in value; above that sum 1½ per share only will be charged.  
Mr. Richards undertakes to furnish full particulars of all business done, and guarantees to render a faithful account, and at net prices. In order the more effectually to assist his clients in their selection of stock, which will be from time to time advertised for sale, he intends establishing a rule not to dispose of any advertised stock until after Tuesday morning's post, and should there be more than one claimant for any particular lot it will be offered pro rata, to each party desirous of purchasing.  
Mr. Richards also begs to remind his friends that he has secured the services of a thoroughly practical mining agent (of 20 years' experience) to report for him on such mines as his clients may be disposed to invest in, for which a mere nominal sum will be charged, &c. Mr. Richards considers very advisable to adopt before he ventures to recommend his friends to purchase, either in dividend or progressive mines.  
All letters or communications addressed to Mr. M. S. Richards, 27, Austinfriars, London, will receive immediate attention.—Dated, Jan. 21, 1859.

**MR. REGINALD HORLEY, SWORN STOCK AND**  
SHAREBROKER, 48, THREADNEEDLE STREET, E.C., TRANSACTS  
BUSINESS in MINING SHARES on commission. The present high price of metals will greatly increase the amount of dividends in the best class of mining shares. Amongst those desirable for investment are the following:—South Canadon, West Canadon, East Basset, Wheel Basset, South Frances, West Wheel Seton, Carn Brea, Far Consols, United Mines, Wheel Charlotte, Great South Tolgus, Providence, Boscan, Wheel Margaret, Wheel Kitty (Leland), Wheel Kitty (St. Agnes), Wheel Trelawny, Mary Ann, North Doleath, Kelly Bray, St. Ives Consols, Rosewarne United, St. Day United, Wheel Ury. During the past week those referred to in our last have in most instances risen from £10 to £15 per share.—48, Threadneedle-street, London, E.C.

**GREAT WHEEL BUSY MINE.—MR. BUDGE, of 4, ROYAL**  
EXCHANGE BUILDINGS, LONDON, is a BUYER of 200 shares, or any less number, at £3 per share, cash on presentation of transfer.  
Mr. Budge is a SELLER of 20 North Downs, £3 13s. 6d.; 1 United Mines, £13s. 6d.; 20 Trelawny, £13s. 6d.; 20 St. Day United, 17s. 3d.; 80 Great Barrier, 28s.; 20 Wheel Kitty (St. Agnes), £24½; 20 Hingston Down, £2 15s.; 100 Wheel Harriett, 15s. 9d.; 10 Bedford United, £24½; 50 Tamar Consols, 22s. 6d.; 50 Lady Bertha, 22s. 6d.; 2 Mary Ann; 20 North Frances; 2 Margaret; 2 Rosewarne, £21.

**GEORGE MOORE, 1, CROWN COURT, THREADNEEDLE STREET.**  
George Moore will SELL the following SHARES, or any part, to-day, at quoted prices, FREE OF ANY COMMISSION:—

1 Carn Brea, £70.	1 North Basset, £21½.	50 Sortridge.
1 Condarrow.	1 Providence.	1 West Seton, £33s.
1 Gumbler, £29½.	1 Rosewarne United.	

**NON-DIVIDEND.**  
50 Carnborne Vein, 7s. 3d. 50 E. Rosewarne, 15s. 9d. 55 Lady Bertha, 20s. 9d.  
1 East Basset. 25 East Russell. 50 North Miners.  
25 E. Gumbler Lake, £13½. 10 Great Alfred. 50 Wheel Addams, 19s. 9d.  
George Moore will sell shares for time, at a slight advance in price, to any one possessing a name of commercial value.  
George Moore will PURCHASE or SELL any shares on commission, when specially requested to do so, for the following charges:—  
For shares under £1 each ..... £0 0 6 per share.  
Above £1 and under £2 ..... 0 1 0  
Above £2 and under £5 ..... 0 1 6  
Above £5 ..... 2 10 0 per cent.  
PURCHASERS of undoubted respectability can register transfers and receive CERTIFICATES of same previous to PAYMENT.  
In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

**JAMES HERRON has FOR SALE the following SHARES, at**  
the prices quoted, and FREE OF COMMISSION:—  
25 Allen. 25 Holmshush. 40 South Buller and West  
50 Bedford Consols, 6s. 6d. 10 Harriett, 14s. 9d. Penstruthal.  
10 Bryntall, £11½. 20 Kelly Bray, £2 4s. 50 South Condarrow, 13s.  
25 Buller and Basset. 20 Lady Bertha, 19s. 9d. 20 Tamar Consols, 28s. 9d.  
20 Belling Well, 19s. 9d. 200 Lady Eliza (Limited), 10 Tincroft, £3 8s. 9d.  
3 Carn Brea, £72½. 4s. 6d. 10 Tolvadden, 20s. 9d.  
15 Cwm Sebon, 18s. 9d. 20 Lewis, 37s. 6d. 10 Tolvadden, £4 18s. 9d.  
1 Cwmystwith, £320. 25 Merilyn, 7s. 9d. 10 Trewatha, 11s. 9d.  
10 Cobbe, £113½. 1 Miners, £113½. 1 Trelawny, £30½.  
20 Catherine and Jane. 25 Falmouth, 19s. 9d. 25 Vale of Towy, 12s. 9d.  
5 Ding Dong, £104. 10 North Robert. 20 West Par, 14s. 9d.  
25 Dale. 20 No. Downs, £23 11s. 9d. 1 Wheel Mary Ann.  
1 Dev. Great Cons., £47s. 4 North Basset, £2½. 5 Wheel Margery, £29½.  
20 E. Gumbler Lake, £29½. 5 North Basset, £29½. 5 Wheel Edward, £2 15s.  
5 East Russell, £1½. 5 North Frances, £7½. 5 West Frances, £10½.  
5 East Margaret, £1½. 5 North Miners. 5 West Basset.  
30 East Rosewarne, 11s. 9d. 5 Old Tolgus United. 10 Wheel Arthur.  
1 East Daren, £110. 1 Providence, £41½. 1 West Canadon, £14s.  
1 East Basset. 25 Falmouth, 19s. 9d. 25 Wheel Addams, 19s. 9d.  
40 Great Canadon. 40 Par Consols, £14½. 1 W. Margaret, £27½.  
1 Gumbler, £29½. 30 Redmore, 4s. 9d. 50 Worthing, 6s. 9d.  
50 Gawton United, 10s. 9d. 20 Round Hill, £1½. 5 Wheel Kitty (Leland),  
40 Great Badden, 1s. 10d. 5 South Basset. £9 17s. 6d.  
50 Great Wheel Vor. 1 South Canadon, £43s. 20 Wheel Crebhor.  
20 Grenville, 29s. 6d. 40 Sortridge. 20 Wheel Trelawny, 22s. 9d.  
10 Great Alfred, £3 8s. 9d. 20 St. John del Key. 5 West Providence.  
10 Great Harrow, 10s. 9d. 20 S. Lady Bertha, 19s. 9d. 5 W. Charlotte, £19½.  
50 Great Sheba, £2 5s. 10 S. Carn Brea, £3 8s. 9d. 10 Wheel Ludcott, £29½.  
10 Hingston Down, £3. 20 St. Day United, 16s. 9d. 5 West Alfred Consols.  
And is a BUYER of— 100 Wheel Trelawny. 20 Kitty (Leland).  
50 Drake Walls. 100 Tolcarne. 100 Holmshush.

**MESSRS. VIVIAN AND REYNOLDS, MINE AGENTS,**  
68, OLD BROAD STREET, LONDON, E.C.  
Messrs. VIVIAN and REYNOLDS are enabled, through the long experience of Mr. W. C. Vivian as an underground agent and manager of mines in Cornwall, and in various foreign countries, to afford information on most important mining districts; and to inspect and report on mines. They are also enabled, by the several years' acquaintance of Mr. J. J. Reynolds, jun., with the transactions of the London share market, to obtain every advantage for those who may wish either to buy or sell mining or any other description of stock. Messrs. VIVIAN and REYNOLDS have daily information from the principal seats of mining, which is at the service of those who may honour them with their confidence.

**MR. C. POWELL, MINING SHAREBROKER**  
2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C.  
C. POWELL'S Selected List of Dividend and Progressive Mines, daily Closing Prices of same, together with terms of commission, furnished on application.  
Dated January 21, 1859.

**MR. EDWARD COOKE, MINING SHAREBROKER, &C.,**  
54, THREADNEEDLE STREET, LONDON.  
Reliable information as to the merits of mines, together with their current prices, given on application. Railway and other shares bought and sold on Stock Exchange terms.  
January 21, 1859.

**THOMAS ROACH, MINING AGENT,**  
37, OLD BROAD STREET, E.C.

**ROBERT OLDREY, STOCK, SHARE, AND MINING**  
BROKER, 8, FINCH LANE (adjoining the City Bank), LONDON, E.C.  
Terms of commission for buying or selling shares in mines, railways, or banks, forwarded on application. Bankers: London Joint-Stock Bank.

**MR. MURCHISON'S REVIEW OF BRITISH MINING**  
FOR THE QUARTER AND THE YEAR ENDING 31st DECEMBER, 1858,  
with Particulars of the Principal Dividend and Progressive Mines, and Table of the Dividends Paid in the past Four Years, IS NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**SPECIAL REPORTS on these MINES, by Captain CHARLES**  
THOMAS, of Dolcoath, WILL APPEAR in MR. MURCHISON'S REVIEW OF  
THE PROGRESS OF BRITISH MINING FOR THE QUARTER AND THE YEAR ENDING  
31st DECEMBER, 1858, which is NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**SPECIAL REPORTS on these MINES, by Captain PASCOE, of**  
South Wheel Frances, WILL APPEAR in MR. MURCHISON'S REVIEW OF  
THE PROGRESS OF BRITISH MINING FOR THE QUARTER AND THE YEAR ENDING  
31st DECEMBER, 1858, which is NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**WHEEL CHARLOTTE, OLD TOLGUS UNITED.**  
SPECIAL REPORTS on these MINES, by Captain POPP, of  
Basset, WILL APPEAR in MR. MURCHISON'S REVIEW OF THE PROGRESS  
OF BRITISH MINING FOR THE QUARTER AND THE YEAR ENDING 31st DECEMBER,  
1858, which is NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**WHEEL ADDAMS.—A SPECIAL REPORT on this MINE, by**  
Capt. NICHOLS, of Frank Mills Mine, WILL APPEAR in MR. MURCHISON'S  
REVIEW OF THE PROGRESS OF BRITISH MINING FOR THE QUARTER AND THE  
YEAR ENDING 31st DECEMBER, 1858, which is NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**LADY BERTHA MINE.—A SPECIAL REPORT on this mine**  
WILL APPEAR in MR. MURCHISON'S REVIEW OF BRITISH MINING FOR  
THE QUARTER AND THE YEAR ENDING 31st DECEMBER, 1858, which is NOW  
READY. Price One Shilling. 117, Bishopsgate-street Within, E.C.

**EAST WHEEL RUSSELL.—A SECTION of the UNDER-**  
GROUND WORKINGS of this mine WILL BE GIVEN in MR. MURCHISON'S  
REVIEW OF THE PROGRESS OF BRITISH MINING FOR THE QUARTER AND THE  
YEAR ENDING 31st DECEMBER, 1858, which is NOW READY.  
Price One Shilling. 117, Bishopsgate-street Within, E.C.

**MESSRS. A. J. HUTCHINGS AND CO'S**  
PATENT IMPROVED WIRE ROPE.  
SOLE MAKERS TO THE  
LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS,  
And the principal Colliery Proprietors throughout the Kingdom.

ROUND and FLAT ROPES of every description, suitable for mining operations or  
other purposes, GALVANISED or UNGALVANISED, MANUFACTURED upon the  
newest and most improved machinery, ensuring greater pliability, durability, and strength;  
and is admitted by the principal coal proprietors to be far superior to any other kind of  
wire rope. The superiority of these ropes over hempen ones, in point of strength, lightness,  
durability, and cost, is admitted by all who have tried them.  
GUIDE ROPES, SIGNAL CORD LIGHTNING CONDUCTORS, &c.

**VALUABLE FORFEITED AND OTHER SHARES FOR SALE.**  
**MR. T. P. THOMAS WILL SELL, BY PUBLIC AUCTION,**  
at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday,  
January 27, 1859, at One o'clock precisely, the following valuable MINING SHARES:—  
9 (256th) parts, or shares, in Eaglebrook Lead Mine, Llanbadarn-fawr, near Aberyst-  
with, Cardiganshire, forfeited for non-payment of calls.  
80 (5120th) Wheel Harriett Copper and Tin Mine, forfeited for non-payment of calls.  
200 (5000th) East Rosewarne ditto, forfeited for non-payment of calls.  
23 (1055th) shares in Carvanall Copper Mine, Cornwall.  
3 (512th) Rosewarne United shares.  
30 (4096th) East Alfred Consols.  
40 (4000th) East Russell.  
20 (5120th) Great Wheel Alfred.  
5 (867th) Cwm Erbins, paying dividends.  
100 (4000th) Devon Burra Burra.  
75 (1024th) Great Sheba.  
125 (17500th) Great Tregune Consols.  
50 Port Phillip Gold Mine.  
5 (2566th) Great Wheel Vor.  
15 (6140th) Wheel Arthur.  
20 (5000th) Willow Bank.  
20 (6000th) Cwm Sebon.

For further particulars, apply to the Auctioneer, at his offices, 2, Crown-court, Thread-  
needle-street, London.  
**FOR SALE, THE VIRTUOUS LADY AND WHEEL BEDFORD COPPER MINES.**  
**MR. T. P. THOMAS** has been favoured with instructions to SELL,  
BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill,  
London, on Thursday, the 27th day of January inst., at One o'clock, the above valuable  
MINES, situate in the parishes of Buckland Monachorum, and Tavistock, in the county  
of Devon, together with the BUILDINGS, MACHINERY, MATERIALS, &c., forming  
the plant of the adventurers in and upon the mines, comprising, amongst other things  
too numerous to mention, TWO WATER-WHEELS, one 24 ft. diameter 9 ft. 6 in. breast,  
and one 34 ft. diameter 2 ft. 9 in. breast; one CRUSHING MILL, one DRAWING  
MACHINE, 30 fms. of 7 in. pumps, and 200 fms. of chain, &c.  
These mines are situate in a rich mineral district, and it is considered by practical  
miners that a small outlay will put them into a profitable position.  
For further particulars and conditions, apply to Mr. T. P. THOMAS, at his offices,  
2, Crown-court, Threadneedle-street, London.

**FOR SALE, THE BULLER AND BERTHA COPPER MINES.**  
**MR. T. P. THOMAS** has been favoured with instructions to SELL,  
BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill,  
London, on Thursday, the 27th day of January inst., at One o'clock, the above valuable  
MINES, situate in the parishes of Buckland Monachorum, and Tavistock, in the county  
of Devon, together with the BUILDINGS, MATERIALS, MACHINERY, &c., forming  
the property of the adventurers in and upon the mines, comprising, amongst other things  
too numerous to mention, one 14 in. STEAM ENGINE, &c.  
These mines are adjoining the Virtuous Lady and Wheel Bedford Copper Mines,  
are well worthy the attention of capitalists.  
For further information, application to be made to Mr. NICHOLSON, 57, Old Broad-  
street, or to the Auctioneer, at his offices, 2, Crown-court, Threadneedle-street, London.

**MR. T. E. W. THOMAS, MINING AGENT AND GENERAL**  
MINING SHARE DEALER,  
11, DALE STREET, LIVERPOOL.

**JOHN ROBERT PIKE,**  
MINING AND GENERAL SHARE DEALER,  
3, PINNERS COURT, OLD BROAD STREET, LONDON, E.C.

Now Ready,  
**IS MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE**  
**CHANNEL FOR INVESTMENT? OR IS IT NOT? FACTS AND FIGURES**  
May be had gratis on application, either personally or by letter.

**MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING**  
AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.  
N.B. Business transacted in every description of stock and shares.

**WEST END MINE AND QUARRY OFFICES, 10, REGENT STREET, S.W.,**  
FALL MALL.

**MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL**  
SURVEYORS, undertake the MANAGEMENT and WORKING OF MINES,  
QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PROP-  
ERTIES in their offices with system, economy, and regularity.  
Messrs. BRUNTON and Co. beg to inform proprietors of mines, &c., that the business of  
these properties is carried on in their office upon the following principles, viz.:—

Accounts systematically and closely made up.  
Statements in detail, and clear summaries of finance and expenditure.  
Entire and impartial openness of books, reports, and documents, to all shareholders,  
for perusal or extract.  
Immediate communication of any important occurrence to the shareholders.  
MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY,  
PLANT, and COSTS OF WORKING FURNISHED.

**MR. WILLIAM WATSON is OPEN to FURTHER**  
ENGAGEMENTS as PURSER of MINES (or the duties of purser and clerk  
combined, having efficient assistants) in DEVON or CORNWALL.  
Kelly Park, Calstock, January 18, 1859.

**CAPTAIN HENRY JAMES, of the MOUNT SALUS MINES,**  
in KINGSTON, JAMAICA, BEGS to INFORM PARTIES INTERESTED IN  
MINES or MINERAL PROPERTY in the island that he will SHORTLY BE AT  
LIBERTY to INSPECT and REPORT on any MINES or MINERAL PROPERTY,  
either for public companies or private individuals, at MODERATE CHARGES. And  
would not object to go to either of the West India Islands, to inspect any mines or  
mineral property.—Arrangements to be made in England, through THOMAS NICHOLSON,  
Abbey House, Tavistock, Devon.—Dated December 22, 1858.

**ROBERT WAKE, CHEMICAL COMMISSION**  
AGENT (exclusively), 1, BOND STREET, MANCHESTER.  
SUGAR LEAD, LITHARGE, SULPHATE COPPER, ARSENIC, &c.,  
of BEST MAKES, at MANUFACTURERS' PRICES.  
Liberal terms to shippers and wholesale buyers. Solicits orders and consignments for  
prompt delivery or settlement.—Manchester, January 21, 1859.

**WHEEL CREBOR.—A NEW SHARES FOR SALE in this**  
very promising speculation.—Address, "W. X." Mining Journal office, 26,  
Fleet-street, E.C.

**PHOENIX MINE.—FOR SALE, THREE or FOUR SHARES**  
in this valuable mine, paying half-yearly dividends of £25 per share.—For par-  
ticulars, apply to Mr. J. S. LANE, 29, Threadneedle-street, City.

**FOR SALE.—50 Wheel Crebors, at 14s. each, free of any commission**  
to the vendee.—Apply to Mr. W. PALMER, 115, Long Acre, London.

**ROLAND MINING COMPANY, DERBYSHIRE.**  
1000 shares, at £1 each.  
Deposit, 2s. 6d. per share. Paid on application.  
Applications for shares to be made to Mr. E. B. PALMER, Stock Exchange, Chester-  
field, from whom all further information may be obtained.

**TO PROPRIETORS OF TIN MINES AND OTHERS.—**  
The UNDERSIGNED are OPEN to CONTRACT for WOLFGRAM in LARGE  
QUANTITIES.—LISTER and BIGGS, 3, Levenshoe Pountney-hill, E.C.

**IRONWORKS WANTED.—A SMALL FORGE and ROLLING**  
MILL is REQUIRED in Lancashire, Cheshire, or neighbourhood, with about 81X  
FUDDLING FURNACES, or convenience for same, and the necessary PLANT for  
TURNING OUT about FIFTY TONS of BAR IRON PER WEEK.—Applications,  
stating full particulars and rent required, to be addressed to "L. V." Mining Journal  
office, 26, Fleet-street, London, E.C.

**WATER WHEEL.—WANTED, a WATER WHEEL of 40 ft.**  
diameter, or above. Parties having such are requested to send particulars and  
price to JENN HITCHINS, General Mining Agency, 8, Finch-lane, Cornhill, London, E.C.

**THE MIDLAND IRON COMPANY, ROTHERHAM, YORK-**  
SHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LO-  
COMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to  
which this iron has been submitted by engineers and railway companies during several  
years, its superior quality has been generally acknowledged, and can be unhesitatingly  
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TWICE as DURABLE as the BEST SHEFFIELD CAST-STEEL at 8s. per cwt.,  
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ROBERT MUSHET and Co., Coleford, near Gloucester.







## Original Correspondence.

## TINNED PLATES FROM PUDDLED STEEL.

SIR,—I observe a letter in last week's Journal, signed by the Mersey Steel and Iron Company. Those who come forward to correct the alleged errors of a reporter should themselves be correct in what they say. Now, in this letter it is asserted that the Lord Chancellor observed "that this was a very proper case to be submitted to such a tribunal" as common law. No such words were uttered by the Lord Chancellor; but it so happens that he did say exactly the reverse. His lordship observed that this was one of those cases for which a legal tribunal was ill adapted, and ought to be referred to an "expert." And not only did his lordship suggest this course, but he named and suggested a party to whom to refer it,—the party named by him being Prof. Woodcroft.

As the declared, and no doubt the true, object of the letter referred to is that this matter should be placed correctly before practical men, it would, perhaps, have been as well to inform them that the whole subject had already been thoroughly investigated before the Attorney-General, by whom all the grounds of opposition were considered, weighed, and disallowed. The assertion that tin-plates have previously been made from "steel manufactured in the ordinary way" was clearly proved to represent only an abortive and abandoned experiment. Nay, the parties who attempted to make them admitted on affidavit that the manufacture was precluded by the high price of steel. Every one in the metal trade above the age of boyhood knows this. But had it been otherwise, is it any reason why a patent should not be valid for making an article from a different material at a great saving in cost, or, in other words, to great public advantage? To those who are in doubt on such a point it will be instructive to peruse the case of *Crane v. Price*, which clearly illustrates the law on this point. It may also be advantageous to consider Muntz's patent for yellow metal, made from the identical materials which had been in use for the same purpose from the earliest records of work in metals. That patent was opposed by powerful firms, and I need not say what was the result of their opposition.—*Liverpool, Jan. 17.* JAMES SPENCE.

## THE COPPER TRADE—THE SMELTERS.

SIR,—Your correspondent "Copper," while answering the letter of Mr. Charles Low, respecting the profits, &c., of copper, refers but briefly to the question of smelting being a monopoly, though quoting the purchasers of ore for the last quarter. He states particulars of 12,925 tons of ore, in value £5,179, having been bought by six companies, many of recent standing. It is very rich of our friend "Copper" making such a statement. Let us quote the firms and quantities purchased, and value; we shall then be in a better position to see how matters stand.

Mason and Elkington	.....Tons	5,869	.....Value	£30,857
Copper Miners' Company	.....	2,934	.....	16,093
Charles Lambert	.....	1,744	.....	7,585
Newton, Keates, and Co.	.....	643	.....	3,991
Patent Alkali Company	.....	158	.....	1,056
Britton Ferry Company	.....	1,577	.....	5,597
Total	.....	12,925	.....	£65,179

Here we have Messrs. Mason and Elkington, a firm of some years' standing, taking no less than 45 per cent. in ore, and 47½ in value. The Copper Miners' Company, which is a very old company, takes 22½ per cent. in ore, and 24½ in value. Next, we have Mr. Charles Lambert, who has extensive mines at Coquimbó, therefore, in a measure, independent of the smelters' alliance, who did all they could to keep him from the Swansea river; such, for instance, as refusing to let him have the works formerly belonging to the Copper Miners' Company, now idle, having been purchased by Messrs. Vivian and Williams some ten or twelve years since to prevent them being worked again. To resume, this gentleman is down for 13½ per cent. in ore, and 11½ in value. The remainder we will leave to the credit of "Copper." The above three show purchasers in ores 81½ per cent., and in value 83½ per cent.

Where now, we would ask, is the open market so boastfully alluded to by our friend "Copper"? It is a complete farce for any one, attempting to blind those who are living on the spot, or at all acquainted with the nature of buying copper ores, to state that there is no monopoly about it. "Copper's" remarks on contractors for loans and the large ironmasters are perfectly absurd, and not worthy of a moment's consideration in connection with the gigantic monopoly of copper smelting.

Perhaps "Copper" can give a solution to the question formerly asked by me about the copper works on the Swansea River, which have been idle for so many years? and likewise whether the Spittly Works have been bought for a similar purpose, and, if report be true, re-let for the purpose of being converted to another branch of the metal trade, in which neither of the great smelting firms are engaged? If he can throw any light upon the matter he will place us in a better position as regards copper smelting being a monopoly to such an extent as such ugly facts have led us to suspect. Diogenes, out with your lantern! SUN DIAL.  
*Swansea Vale, Jan. 17.*

## THE COPPER MINES OF SAN FERNANDO, CUBA.

SIR,—Having seen the name of Messrs. Arrieta, in a communication of Prof. Ansted in your Journal, connected with picking out "the eyes of the San Fernando Mines," I requested him through your Journal to favour me with a full and clear explanation of what he meant, not with regard to Cornwall or any other place, but with regard to San Fernando. He has deemed it more convenient, I presume, not to do so, but furnishes me, instead, with a scientific and abstract version quoted from Sir H. De la Beche's works, applicable and referring to Cornwall. I again beg of Prof. Ansted the favour of clearly and unmistakably mentioning by their names the precise localities or places which contained those eyes that, he says, have been picked out in San Fernando.—*London, Jan. 19.* J. J. DE ARRIETA.

## EDUCATION OF COLLIERS, AND THE USE OF MINING SCHOOLS.

SIR,—Everyone interested in the very important work of promoting the cause of education in mining districts, with special reference to educating miners in those branches which are so requisite to them in their subterranean occupation, must be glad to hear of the movements which are being made in this matter both in England and Scotland. It is unquestionably very important and highly necessary that suitable teachers and classrooms be provided in large colliery districts for the use of such colliers as are able and willing to take advantage of these provisions; but if we are to have working colliers in the class-room, we must have some efficient permanent means of giving them pecuniary assistance whilst pursuing their studies. Allow me, through your valuable Journal, to suggest to proprietors and managers of collieries a plan of encouraging and assisting the young men in their employment who may be desirous of qualifying themselves for places of overmen or deputy-overmen in collieries, but who lack the means of taking advantage of the educational facilities which are now being provided for them. I would suggest that coalmasters and colliery managers appoint a time and suitable place for the examination annually of such young men in their employment as might wish to compete for a money prize—say 20*l.*, or from that to 50*l.*; the prize to be awarded to the competitor who shows the highest attainments in a knowledge of the safe and economic working of coal pits, and in reading, writing, arithmetic, and mensuration. The money for the prizes may be subscribed by gentlemen in the respective colliery districts immediately interested in coal works, who, I have no doubt, would in most cases be assisted by benevolent neighbours not so directly interested; or a fund can be established to which the workmen themselves may have an opportunity of subscribing.

If the subject be fairly represented to the Government, and the necessity and probable good results of Government assistance well established, I have no doubt but that local subscriptions would be very liberally assisted by Government grants. The attendance for at least 12 months to the classes of one of the mining schools in the county must, of course, be made imperative on the successful competitor. I am persuaded that such a scheme would very materially improve the attendance of boys at the British and other schools already established in colliery districts, and raise the average age at which they leave school to commence work in the pit, so that their parents would be anxious to prepare them for obtaining the "Mining School Prize." It will also be a great incentive to home studies with the youths who have finished their school days, and are now at work in the pits, and to others after they left school to commence work; the

latter will be induced to make good use of what they have been taught at school.—*Bristol, Jan. 19.* A WELL-WISHER.

## GOVERNMENT MINE INSPECTION.

SIR,—I cannot agree in the comments that have lately appeared in your useful Journal regarding the Inspectors of Coal Mines. It is simply impossible for an Inspector to act as viewer (which is what the articles propose) over the whole of the vast number of collieries in his district; and nothing would so effectually sap his usefulness in searching out and fixing neglect upon the proper party if he himself were implicated.

Some of the collieries have a large number of separate pits, the workings in which are quite distinct. The Messrs. Knowles's collieries, the Worsley Collieries, the Fairbottom Collieries, John Hargreave's collieries, the Halton Collieries, are each of them work enough for one viewer. Indeed, take any one head, such as steam-boilers, the work that comes under it for a viewer could not be compassed by an Inspector, as proposed. There are as many steam-boilers in that one district as there are in the Manchester Steam-Boiler Association's list, and yet they have one head inspector and sundry sub-inspectors. Or, take winding-ropes; if their security has to depend upon the Inspector's inspection, a large number that were quite good when he saw them would be worked out before he could get back again; and so with the other heads. In short, inspection to be useful should aim at punishing neglect, and visiting collieries where there is reason to suppose that removable danger exists. A COLLIER.

## COLLIERY OPERATIONS IN THE UNITED STATES.

## MID-LOTHIAN COAL MINES, VIRGINIA—CORNISH PUMP-ENGINE, ETC.

SIR,—The mines of the Mid-Lothian Coal Mining Company are situated in Chesterfield county, 13 miles from Richmond, and ½ mile from the Richmond and Danville Railroad; a branch tract from that road connects the mines with their shipping point opposite Richmond.

This company has been formed, and in successful operation, for about 20 years. They now own about 2000 acres in the heart of the Chesterfield bituminous coal basin. The coal is considered of superior quality for gas, grate, and forge purposes, and finds a ready market. The average thickness of the seam of coal, varying from 4 to 50 ft., may be estimated at about 20 ft. Several vertical shafts, varying in depth from 550 to 771 ft., have been sunk through the vein at different points, and communication effected from one to the others, which gives good ventilation to the underground workings. By the aid of three large hoisting engines they are able to raise a large quantity of coal.

The company are now engaged in sinking a new shaft near the centre of their property, which they expect to complete in 12 months, and which when completed will open to them an additional valuable field of coal. About two years ago this company leased a small piece of land adjoining their mines, through which coal could be more advantageously raised than from any other point, and drove a drift into what was considered an unwrought piece of coal, when suddenly they cut into an old drift connected with extensive underground workings, filled with water; this communication was at this highest point of the company's workings; and as the old workings cut into were connected with vertical shafts 400 or 500 ft., and filled with water, the force with which the water poured into their works was enormous; it swept away most of the timbers in its route, washed up the railway tracks, knocked down large quantities of coal, in a few minutes filled the whole of the workings, and stood 40 ft. above the drifts in the principal vertical shaft. This accident occurred, fortunately, about midnight, when only 15 hands were below, 10 of whom were lost. Previous to this the water had been kept out of the mines by large buckets fixed in cages, and worked by the hoisting engines at night; but now so large a quantity had come in at once, and additional feeders had been cut, that it was found the whole power of all their hoisting engines, working day and night, was only sufficient to keep the water at bay, and that some additional power would be necessary to free the mines. By taking accurate measurements of the buckets, and keeping an account of the number raised, it was ascertained that the quantity coming in in 24 hours was about 220,000 gallons. It was determined to erect a pumping-engine of sufficient power to drain the whole of the workings, leaving the hoisting engines for the exclusive purpose of raising coal.

After a due investigation in regard to the best kind of pumping-engine now in use, and by the advice of Mr. Wm. W. Wood, chief engineer U.S.N., it was decided to erect a Cornish pumping-engine of the most improved kind. Proposals were invited from the principal foundries of the country for building such an engine. Those of Messrs. Merriek and Sons, proprietors of the Southwark Foundry, Philadelphia, were accepted.

The engine which has been furnished by them is a "beam Cornish;" its cylinder is 60 in. diameter, with 10 feet stroke of piston. The piston is packed with a single cast-iron ring, bored eccentrically, and slit and tongued on the thinnest side, being kept central and in contact by four springs. The beam, or bob, is of equal length—28½ feet from centre to centre of end pins, having wrought-iron catch-pieces. It is double, and besides being of the usual proportion for strength, is banded by heavy wrought-iron bands on the upper side, put on hot, and extending from underside of bosses around them, and over horns cast with beams on their upper side. The total weight of the beam and centre shaft is 19 tons. The cylinder is, of course, steam jacketed, and cooled as usual. The valve gear is of the most improved kind, and, for the purpose of gaining room, the exhaust chest is on one side of the equilibrium pipe, which is central. The exhaust pipe is carried through a trough supplied with cold water from the condensing cistern. There are two cataracts, one being applied to regulate the opening of the exhaust and top steam-valves, and the other that of the equilibrium valve. The steam arm passes through a slot in the single plug-rod, and is shut by a curved tongue piece, whose position is controlled by a regulating screw, of length sufficient to give the requisite variation in cutting off. The valves are opened by weighted pistons moving air-tight in cylinders on the cataract floor. The air-pump is 26 inches diameter, 5 feet stroke, dipping into the condenser, and having in its bottom a grating carrying a circular drum foot valve; the bucket valve is also of gum; the delivery valve, or cover, of cast-iron, float faced with wood. The injection valve is provided with a wing throttle, opened and closed with the exhaust. The vacuum attained is 28 inches. The condenser, and greater part of the air-pump, are immersed in the condensing cistern, and covered with water. A balance-bob is on the surface, connected to the main rod. Steam is furnished by three single fire boilers, 4 ft. diameter and 26 ft. long, set below ground level. The fire is 45 in. in diameter, containing at the firing end the grate, which is 6½ ft. long. The heated gases passing first through this fire, return at the sides to the front end, descend, and pass under the bottom into the connecting flue to the chimney. The connecting flue contains a heater 30 inches in diameter and 28 feet long, through which the feed water passes before entering the boilers. Over the front end is a steam drum, 30 in. in diameter and 13 ft. long, connected by pipes to stop valves in each boiler, and from which rises the main steam-pipe. The boiler shells, or plates, and flues are of ¾ in. best Pennsylvania plates, the heads, or ends, are of ½ in. plates. The chimney is 4 feet square in the flue and 70 ft. high. The feed-water is supplied from an adjacent spring by a steam-pump 10 horse-power, the mine water being too much impregnated with mineral substances. This engine has been erected upon one of the deepest vertical shafts on the concern, which is 770 feet. The pitwork consists of three plungers and one drawing-lift: the whole of them are the same bore, as all the water accumulates to bottom, being 14 in. diameter. The main rod is made of Pennsylvania pine: the first 240 feet from nose of the bob is 16 in. by 14 in., the next 240 feet is 14 in. square, and the remaining 240 feet is 12 in. square, thus making these rods 720 feet long. These rods are joined together by scrap-iron strapping plates 16 feet long, with 16 screw-bolts in each plate, and each joint having four plates. These rods are supported the whole length on guides, or stays, not exceeding 30 feet distant; these guides are of wood, 7 in. by 10 in., fastened into the wall of the shaft, and are held together by screw-bolts and iron glands, which at any time can be easily adjusted. At each of these guides the main rod is protected by thin hard wood linings, and held to the rod by quarter glands, screwed. Each plunger-pole is screwed to the main rod by eight strong iron staples and glands, with a filling piece of wood 9 in. thick; the upper end of the stock works through a set of guides similar to those on the main rod. The main rod has four sets of catches, three of them on the down stroke and one on the up stroke, which prevents the whole machinery travelling beyond a given length of stroke in case of accident. The foundation of each plunger consists of ten pieces of pine, 12 in. deep, fastened into the walls of the shaft in front of the main rod; and at one side of the rod cross timbers are again built upon these, 4 ft. wide and 5 ft. deep, fitted very snugly together, constituting 15 ft. of solid timber under the cistern, thereby preventing any spring or motion in the plunger or column on the return stroke of the engine. The stuffing-boxes are packed partly with gum and partly with Russian hemp, either of these alone was found not to answer so well. The construction of the clacks introduced here are those commonly called the gribble clack, consisting of a cast-iron shell, or lid, 1½ in. thick, having a hinge which works upon a pin or bolt supported by two loops fastened to the outer part of the seating. This hinge lifts about 2 in. in the loops at every up stroke of the water. The shell has a groove 1½ in. deep by 1 in. wide all around; shaped to the face of the seat in this groove four slips of sole leather are fastened on their edge, leaving a projection of ¼ in. for a seat upon the seat. The water way through these clack-seats, and throughout the entire columns, are the same in diameter as that of the plungers. Some of these clacks have been at work over six months without being re-greased.

The engine was started to work in last May, and in a few months drained the mines, and the raising of coal has been resumed with vigour. This is the first pumping-engine of the kind which has ever been erected in this State: it works in admirable order, and for quality of material and workmanship reflects great credit to the builders. The company are, moreover, entitled to much credit for the foresight shown in providing, in the erection of this engine, a surplus power, which will enable them to extend their operations to almost any extent. The hoisting engines are of the ordinary kind of high-pressure, and coal is raised by the cage and guide-ropes with four-wheel boxes, which carry ½ ton of coal in each box; and, when in full speed, it is estimated to raise 60 of those boxes per hour with each engine.

In view of the wide extent of territory, the superb machinery erected,

and other facilities for making large and profitable returns, this company may congratulate themselves as only on the eve of doing a wide and profitable business for many years to come. JOSEPH BUZZO.

Mid-Lothian, Chesterfield county, Virginia.

## LADY BERTHA.

SIR,—Adhering still to my report, I refer Capt. Metherell to Murchison's *Review of British Mining*, where he will find the whole of my statements fully corroborated by Capt. Thomas Richards. In his report, which is the only disinterested one that has been published since my inspection, the wine for the first 8 ins. is valued at 5 tons per fm. for its whole length (from 9 to 10 ft.).

This question of the value of the wine being settled, so far as I am concerned, I now turn to a matter of much greater consequence, to which I wish to direct Capt. Metherell's particular attention. On Dec. 2, his report in your Journal states that the lode in the cross-cut in the 41 fm. level had been cut into, and was worth 4 tons of ore per fathom; that he had got rocks of ore to surface, full 1 cwt. each; and that no north wall had been reached. In another column of the same Journal I find the following paragraph:—"A most important discovery has been made in driving the cross-cut from the engine-shaft in the 41 fm. level (bottom of the mine), where the lode is turning out from 4 to 5 tons of rich yellow ore per fathom, and no north wall yet. Streams of water are gushing from the end, which shows there is even a more valuable lode ahead. Immense rocks are being drawn to surface, weighing upwards of 1 cwt. each."

This discovery in the bottom of the mine being, of course, considered of great importance, my attention was called to it; and on a careful examination of the cross-cut, I found the lode composed of capel, quartz, muddle, iron, and stones of ore. Capt. Thomas Richards and other agents of experience who have since inspected it state that the lode will not pay for taking away.—*Devon Great Consols, Jan. 18.* WILLIAM CLEMO.

## TOLVADEN MINE—ITS STATE AND PROSPECTS.

SIR,—In passing through the Redruth and Camborne districts, amongst others I visited a mine wherein a discovery was made some eight months ago, since which they have sunk and driven some few fathoms through an ore lode, yielding in the aggregate only about 60 tons of moderate quality ores, risen so slowly that up to this time they have not even a slide to receive it, and only four dressing girls on the mine. Tolvaden has been worked about two years, and returned so early and profitably that it was unnecessary to make a call, and at this hour there is a balance in the purser's hand, independently of the 360 tons last sampled; the sales having steadily risen, and during the last year about 11,000*l.* worth of copper ores have been sold. Now, to be in this position what has it done? Built two engine and boiler-houses, smith's and carpenter's shops, five dressing-rooms, nine slides, with large floors and appurtenances, one capstan and three whim-roules, balance-pit and engine-pool; bought and erected a 40-in. pumping-engine, and a winding-machine, balance-beam, capstan-shears, horse-whims, with 60 fms. of pit-work, &c.; sunk 295 fms. of shafts and winzes, driven 368 fms. of levels and cross-cuts by and through the lode, requiring a proportionate quantity of timber, coal, and iron, with numerous other requisites well known to miners, and common to all mines, preparatory for sound and advantageous working, and lastly lords' dues. Now, I ask any impartial man what Cornish mine has ever sold more in this time without a call? Or what mine shows more work done for the same cost?

Notwithstanding the profits, many have, for various unworthy reasons, attempted to decri this mine; they will, however, be compelled to admit much more than they have yet seen realised. One of the wiselings said, five samplings since, that he could not see another in the mine; then cranes No. 2 and No. 3 doubted the 10 fm. level, then after the 20, and of course the 30 also, which is the bottom of the mine. The value of their opinions, the enormous sales, 64 fathoms long of tribute already set, at the average of 5*l.*, 4*l.*, 12*l.*, in the back of the 20, standing nearly whole to the 10 through the whole mine, besides the pitches above this level, and two courses of ore in the 30, or bottom end, just cut into, shall antagonise for miners' judgment. Now, I will ask if the former mine, and others equally meritorious and progressive, are selling at about 40,000*l.* in the market, what should be a proportionate price for the latter? I have been so convinced of its merits from most palpable evidence that I have written these few words of plain unvarnished facts to enable the public to have a knowledge of its real position, and as most of these expenses are not recurring, judge therefrom as to its capabilities for large and immediate dividends. There is one thing very certain in the anomaly of the mining market, that shares now quoted from 5*l.* to 6*l.* in Tolvaden are worth in viable value four times as much as they were when selling freely at 10*l.* per share, 18 months since. *Murazion, Jan. 12.* ANTI-BAMBOZZLE.

## THE OLD TOLGUS UNITED—NEW SHARES.

SIR,—As your report of the proceedings at the Old Tolgus meeting, so far as the remarks attributed to me are concerned, is calculated to convey an erroneous impression, permit me to say that, with one exception, I was the only individual present who expressed an opinion adverse to the issue of new shares, as I considered that to make a call for the immediate requirements of the mine was the more legitimate way of proceeding. The report in the Journal would rather imply the contrary to this. I also stated that a shareholder declining to take up his new shares would, as a consequence, reduce his interest in the mine one-half, and did not ask whether or not such would be the case. Again, not wishing to oppose the almost general feeling of the meeting in favour of the issue of new shares, I said, if carried out, I should be glad to take any to which I might be entitled, and suggested, in reply to a remark, that if any were declined by shareholders they should again be offered *pro rata*. J. Y. WATSON.  
*St. Michael's-alley, Jan. 15.*

## PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.

It is much to be regretted that so serious a disturbance as that which has recently occurred at the Clunes should have to be recorded, more especially as the progress of the Port Phillip and Colonial Company was just beginning to be satisfactory. A correspondent of the colonial *Mining Journal* writes that on the night of Oct. 17 one of the drives taken from the north shaft, in the Clunes Company's property, cut into the "encroachment" of the outsiders, against whom injunctions to restrain them from working in the private land had been obtained, but disregarded. The company's men were resisted with great violence, and several of them injured; while the encroaching drive was barricaded, so as to prevent their entrance without danger to life. At the same time, another shaft touched on some old works connected with the outside drives, and the outsiders having lighted a fire, in which pepper and sulphur were thrown, drove the company's men out of their works. Morgan and party then conducted water down their shaft through a hose, and directed it into the drives of the company, with the object of loosening the soil (it being old ground), and so bringing in the timber and thus destroying the drives. The company's men now resorted to fire, endeavouring to smoke out their opponents, so as to enable them to break down the barricade. Finding their position untenable, Morgan and party called a meeting of the outsiders on the evening of the 20th, and while most of the company's men were at supper the outsiders rushed to the north shaft, drove away the men therefrom, and pulled down and fired the whim and house. They then proceeded to one of the shafts, and destroyed the top works, and from thence to an adjoining shaft, where they were doing the same, when the police arrived and drove them off. The men down the north shaft, who had been in great danger, were now drawn up, and before arrangements could be made for sending down another shaft Morgan's party got possession of the company's drives, which they destroyed. The damage done is estimated at about 3000*l.* to 4000*l.*, and a great extent of ground that would have paid for working cannot now be reopened. Since this further aggressions have been made by the outsiders, actually in defiance of the lawful authorities. The company having been assured from what was stated by the Premier in the Assembly that they were to be protected at all hazards, they determined to eject the intruders from the company's claims, and accompanied by a strong body of police proceeded down the shafts, where they were threatened with certain destruction, by blowing up the drives with powder if they advanced. Seeing the determined attitude assumed they retired; had they not done so their lives would probably have been sacrificed, as several explosions took place, bringing down timber, and causing great destruction.

The old squatting station of Clunes is situated on the lower portion of Creswick Creek, about 20 miles north of Ballarat. The Clunes quartz reefs are said to be the first which were ever worked in Victoria; they are exceedingly rich, and after having been worked for some time superficially, and without system, have since the Port Phillip Company's arrangements were carried into execution, received proper attention, and are now worked in a miner-like manner; indeed, this is the only mining company on a large scale in the colony where the application of capital and machinery is directed by proper mining skill, and the workings conducted on as perfect a system as that met with in the best conducted mines in Europe. The geological character of the district is similar to that at Ballarat and other gold fields, but the old schist valleys have entirely disappeared under a general inundation of volcanic rocks or lava. At Clunes, the tabular basalt has been removed through the denudation of Creswick's Creek; laying bare a small track of the old schist surface, and thereby bringing to light several of the richest and largest quartz dykes ever discovered in the colony. A number of temporary shafts have been sunk for working out the quartz above the water-level, and tramways are laid in the levels, and from thence to the roasting kilns. Another tramway is laid on the surface, from the north shaft to the engine-shaft, and a double incline conducts the quartz from the engine-shaft to the crushing works, the descending loaded wagons drawing up the empty ones. For the purpose of working the veins below the water-level, an engine-shaft has been sunk between the Old Man and the east veins to a depth of 250 feet, and a 30-horse power engine erected, with 10-inch pumps, to draw off the water. Cross-cuts will be driven from this shaft to the veins, and drives will be taken north and south in the latter, dividing them into slopes, which will be worked in the usual way. The company are now pressing forward their drives night and day, to cut off these trespassers, and secure the ground. At the foot of the hill are the crushing works connected with the mine and the roasting kiln by tramways of level to the hoppers. The crushing machinery consists of 44 heads of wet stamps and one Chilean mill, the



latter being principally used for testing small parcels. These will crush 400 tons of quartz per week to fine powder, the escapes being covered with a wire-gauze having 256 meshes to the square inch, and a good supply of water is obtained from the Crewick Creek, which flows in front of the works. These facts, coupled with the knowledge that the company are supported in every reasonable manner by Government, justify the opinion which so many interested in the Port Phillip Company entertain that, although the dispute with the outsiders may occasion some little delay in fully developing the resources of the company, no permanent injury will be experienced.

## Meetings of Mining Companies.

### WHEAL UNY MINING COMPANY.

A quarterly meeting of adventures was held at the offices of the company, 7, Token-house-yard, on Wednesday.—Mr. P. L. HINDE in the chair.

Mr. W. MURPHY (the secretary) read the minutes of the previous meeting, which were confirmed.

A report from Capt. J. Rose was then read, from which the following is condensed:—The 90 had been driven 4 fms. west of the engine-shaft, driving by six men at 181. per fm.; they had just cut into the south part, and had found good stones of tin. They have suspended the driving of the 80; they have ten men stopping the back of this level, at 71. per fm., lode worth 181. per fm. The winze below the 60 is down 4 fms., sinking by four men, at 131. per fm. The 50 is being driven west by four men, lode worth 61. per fm. They had 50 tributors working on the tin lode. The new shaft has been sunk 15 fms. below the 50, sinking by nine men, at 351. per fm. The 50 has been extended 4 fms. east and 3 fms. west of the new shaft; this level, it appears, is not on the main part of the lode, but in driving west in the 14 he met with what he was fully persuaded was the main part of the lode; they had cut into it 18 in., and it had no south wall—the lode was composed of quartz, flint, and spots of copper ore, the ground around being of a highly favourable character. East of the new shaft the men had been put to drive south, where it is thought the main part of the lode is. The 40 was driven 36 fms. west of the new shaft, through a very kindly lode, 2 ft. wide, containing stones of copper ore. 15 fms. west of the new shaft they had put up rise, through a lode worth 141. per fm. The 40 has been extended 45 fms. east of the new shaft, through a kindly lode.

The following statement of accounts was then submitted:—

Balance last audit	£ 147 6 7
Mine cost, Sept., Oct., Nov.	168 15 0
Merchants' bills, Sept., Oct., Nov.	695 13 0
Lord's dues	131 14 5
Office expenses, discounts, &c.	42 18 1=£3687 7 11
Tin and copper ore sold	£3979 10 5
Calls received	128 0 0= 2507 10 5

Leaving balance against mine £ 179 17 6 |

The CHAIRMAN observed that although the tin returns had not been so good this quarter as they were in the previous one, still they were very encouraging; and it was satisfactory for them to know that they not only had a good tin mine, but that they also had an excellent copper mine. The Mining Journal had frequently called attention to the richness of this mine, and the great probability of the shareholders receiving a very large return for their outlay. The mine had lately been examined for a private person by Mr. Evans, who had reported most favourably upon it, and had further stated that so far as present appearances went the mine was as yet only in its infancy. During the time the present directors had been in office the greatest exertions had been made to push on the works; and he considered that the remarks made on the management by a correspondent in the Mining Journal were uncalled for, and dictated by private motives.

It was proposed by the CHAIRMAN, seconded by Mr. SPALDING, and unanimously resolved, that a call of 2s. 6d. per share be made, to meet the current expenses.

The present directors were re-elected; but, in consequence of the death of Mr. Wood, Mr. R. Huckle was elected to fill his place on the board.

Thanks were voted to the directors for their able management of the affairs of the company.

### ST. DAY UNITED MINING COMPANY.

A special general meeting of shareholders was held at the company's office, 27, Austin-friars, on Monday, Mr. J. HALSTED in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.

The CHAIRMAN said that the business of the present meeting was to take into consideration the resolutions passed at a meeting held on Dec. 23, with a view to their confirmation or otherwise; and in order to forward the business of the meeting the committee had framed a set of resolutions for the consideration of the shareholders present. And if any difference of opinion should exist, which he did not anticipate would be the case, each would show his honesty of purpose by a temperate use of language in his observations; for if they were honest men they had but one object in view—the success of the undertaking. He would not detain the meeting by any further prelude, except by saying that he believed he was borne out by the manager's report, and from reports of other competent men, that in St. Day United Mines they have a real property, and from which all who had embarked in the undertaking were justified in anticipating the most favourable results. The requisition calling for the special general meeting was, in the course of a few days, signed by shareholders holding 10,018 shares; this showed the general feeling. The set of resolutions framed by the committee, as he had before stated, would be brought before them for their consideration.

Mr. KING read the resolutions passed at the meeting on the mine.

The SECRETARY stated that as the committee considered a great portion of the resolutions referred to were not in accordance with the views of a large number of shareholders, they submitted the annexed propositions:—"That the said resolutions (with the exception of that part of the second resolution commencing with the words 'that all copper ore,' and ending with the words 'bankers, Redruth,' and the whole of the third resolution) be confirmed; and that as the said portion of the second resolution, and the whole of the third resolution, are not in accordance with the wishes of the adventurers (holders of 7743 shares) represented by proxy at the meeting on Dec. 23, the same be, and are hereby, rescinded."

Mr. HALSTED, seeing that the general feeling of the shareholders was in accordance with the terms of the resolution, he would move that the resolution do pass.

Mr. E. BOYLE, in seconding the resolution, observed that the motive which induced him to make a few remarks arose from it being just possible that it might be conceived that something like a spirit of antagonism existed between some portion of the shareholders and others. Now, on his part, he was satisfied that spirit did not exist, for the one common feeling was to conduct the mine that it should be placed in a much more satisfactory position than it has hitherto held. In order to bring that about, it was deemed essential that a separation should take place between those who had the management of the operation and those having the control of the finances. That this was desirable he thought every one would admit who had an interest in the undertaking. The manager would then be under the control of the committee, and would every fortnight furnish them with his report of the operations. All must admit that this course would make their affairs prove satisfactory, and meet with the concurrence of the whole body of shareholders. It was desirous that gentlemen in Cornwall should know that they had a strong wish to act in unison with them, and, therefore, the committee it best to pursue their present course. The better management of the mine would reconcile Cornishmen to the change desired. The arrangement proposed by the committee would establish their mine in the confidence of the public, and remove the feeling that has heretofore existed in reference thereto, which, of course, would be for the benefit of the shareholders. Taking into consideration the prospects now before them—the call would free them from everything, and that their returns for the future may be legitimately depended upon—there was a fair reason to hope that dividends would be the recompense for the patience they had manifested, and which they had a right to expect.

Mr. GOULD asked if any liability was charged up?

Mr. F. FAYON, in answer, stated that everything was charged up.

Mr. CHILDS (who appeared on behalf of the Messrs. Williams) said those gentlemen naturally felt very desirous to have their interests represented at that meeting, as great interests were concerned in that undertaking, not only as respects the St. Day United in particular, but also adjoining mines. As Messrs. Williams were very anxious that everything should be done for the best interests of all, they wished him to attend and represent them, their desire being that nothing should be done hastily or unwisely. He was not aware what the nature of the resolutions was that were to be submitted to the meeting, but he desired to tell the directors of all concerns in the mine, and to speedily develop and success of this undertaking. He was bound to state that his wish was that no immediate action should be taken at present, but that the matter should be referred to a committee or deputation for their consideration, and to see whether was proposed should be for the benefit of the mine. He would, however, make no further observations, because he was convinced that the feeling of the shareholders present was for the general interests of all concerned.

Mr. NIXON suggested that the whole of the resolutions should be read, and then taken *seriatim*. He was glad to see the spirit that had been evinced by Messrs. Williams, and he should think it would be desirable for some gentleman of their committee to see what Messrs. Williams have to propose; it might be that they were anxious that what they were then proposing was that which they themselves desired. He always found that Cornish suggestions should be well received. He would rather see the change carried out by agreement, by mutual understanding, than by any absolute act.

The CHAIRMAN considered it quite clear that the feeling in London, both with the committee and shareholders, was that there should be a unity of action, rather than division. They had thrown out the olive branch for peace.

Mr. DICKSON could not see that the course proposed was in any way hostile or antagonistic. They were not asking for one stone more power, and unless it were shown that the gentlemen of the committee are unfit to have their names attached to the cheques, he could see no objection to the resolution.

Mr. CHILDS did not think the resolution in any way hostile; and feeling the importance that nothing should be done hastily, he had been directed by Messrs. Williams to attend that meeting; and he must say that he had received from the committee the greatest courtesy.

Mr. E. BOYLE said, if there were any conflicting interest between Messrs. Williams and themselves, there would then be a necessity for an adjustment of that meeting; but they were not asking for one stone more power, and unless it were shown that the gentlemen of the committee are unfit to have their names attached to the cheques, he could see no objection to the resolution.

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**DEVON GREAT ELIZABETH.**—W. V. Williams, W. Goyen, Jan. 20: We are daily expecting to come on the wall of the lode in sinking Allen's engine-shaft; all the water is coming from the north side of the shaft, and very strongly mineralised. The ground is very congealal, and easy for sinking. Before our next report reaches you we hope to have cut into a course of ore. Our machinery is all working well. The smith and carpenter are preparing the materials necessary for the whim.







**NORTH MINER.**—M. Dunn, Jan. 20: The ground in Dunn's level is a little harder for driving than was last reported; there is some very fine spots of ore in the end. The end in Dunn's level is looking very kindly, with the ground a little easier for driving. The end in the bridge level is just the same as last reported. The end in Thomas's cross-cut is looking very well, and producing large stones of ore. We have completed the tramroad and air-pipes into a heavy run of ground in Thomas's level, but which I hope to get through in a few days.

**NORTH WHEAL ROBERT.**—J. Richards, Jan. 19: Murchison's Engine-shaft: In the 62 west the lode is 3 ft. wide, containing quartz, manganite, and stones of ore. In the 62 west, on the north part of the lode, the lode is unproductive, and the drive is suspended, it being intended to prove this part of the lode by rising from the 62 level. In the 62 west, and west of Gorman's cross-cut, on the south part of the lode, the lode is 18 in. wide, composed principally of quartz and ore, worth 1/2 ton per fathom. In the 52 west, and east of Brook's cross-cut, on the south part of the lode, the lode is 1 foot wide, and yields good stones of ore. In the 42 west, east of Carter's cross-cut, on the south part of the lode, the lode is worth full 3 tons of ore per fathom. In the 42 west, and west of Gorman's cross-cut, on the north part of the lode, the lode is 3 ft. wide, and worth 2 tons of ore per fathom. In the 30 cross-cut north the ground is favourable for progress. In the 30 cross-cut south good progress is being made, and the ground continues easy for driving. The Trial shaft is down the required depth for a 52 fathom level, and the plat capel, manganite, and flookan, with occasional stones of ore. Trial shaft: In Gorman's winze, sinking below the 42 west, on the south part of the lode, the lode is 2 tons of ore per fathom; it is, however, again taking its regular course underneath, and is worth 2 tons of ore per fathom. South Lode: In the 42 east the lode at present only yields stones of ore, and the drive is suspended, to admit of some ground being stopped in the back thereof; and as soon as the stoping is sufficiently high to admit of a stall being put in the drive will be resumed. The lode in the stop is worth 2 tons of ore per fathom. In the 42 west the lode is 18 in. wide, and contains good stones of ore; this drive is also suspended for the same reason as above.

**OLD TOLGUS UNITED.**—G. Reynolds, Jan. 19: The lode in the shaft sinking below the 42, is 16 in. wide, producing stones of ore and manganite, and the ground more favourable. The cross-cut in the 42 is being forced on without hindrance, and the ground is much the same as it has been. The 40 west, lode, going west in the 32, is worth 2 tons of copper ore per fathom; this lode, going east, is worth 1/2 ton of copper ore per fathom; the stopes in back of this level are much the same as was last reported on.

**OLD WHEAL BASSET.**—Jan. 18: The lode in the level west of the new shaft is 3 ft. wide, composed of prill and spar, but poor for copper ore; as the end is easy for driving we thought it was better to drive west another month before we cross-cut, as we recommended in our last report; this level is set to drive by two men and two boys, at 3/4 per fm. There is little doing at present on tribune.

**PEDNAR-DREA UNITED.**—Jan. 17: Since the last bi-monthly meeting the engine-shaft has been sunk 3 fms. 9 ft. 6 in., the lode is from 6 to 7 feet wide, producing low-price stamping work for tin. The shaft has been sunk 10 fms. 5 ft. 6 in. below the 90; the 100 on the cross-cut of the present, and put the men to drive east and west in the 100 on the cross-cut of the lode; the lode in each end of the shaft is large, and of a very promising character. The 40 west, on engine lode, has been driven 1 fm. 5 ft.; the 40 east, on engine lode, has been driven 1 fm. 4 ft. 6 in. The 60 west, on engine shaft, has been driven 4 fms. 4 ft. towards the old workers' deposit of tin, reported to be in the bottom of the 60. The 55 east, on the new lode, has been driven 1 fm. 2 ft. 10 in.; the lode is about 4 feet wide, and letting out a large quantity of water, though at present unproductive. Cobblers' shaft has been sunk 3 fms. 6 feet; lode producing low-price stamping work for tin. The 40 cross-cut, south from Bragg's shaft, has been driven 5 fms. 3 ft. 6 in.; we expect to intersect a lode shortly in driving in this direction, if the ground continues as favourable as at present. Though some of our tribune stopes in the upper levels are not yielding quite so much tin as formerly, there is very probability, by sinking the engine-shaft, and driving east and west in the 100 on the cross-cut of the lode, that we shall open out good tribune ground that will last for years. The mine is still in its infancy, and only just beginning to open out. We sold for the last two months 51 tons 4 cwt. 2 qrs. 2 lbs. of black tin for 3549/1. 16s. 9d.

**PENDEEN CONSOLS.**—Wm. Eddy, J. Cartwright, Jan. 18: Since last setting-day we have extended the 94 north from shaft 18 ft. 10 in. high; the lode is nearly all standing in the east side. The lode is large, and where we have broken in we notice good stones of grey ore; we have set the men to take down all this lode before we extend the 94. This will be reported on next week. We have extended the 94 fm. level 14 feet 6 in. south from shaft; the lode in this end is poor. This level is 8 fms. south of shaft, and no granite, and as the lode is about 6 feet, which is unproductive; the rise in the engine-shaft, below the 94, before we sink we must cut the skip-road 18 feet; this work will take the shaftmen next week; after that is completed we intend to sink with nine men. The 84 north, No. 2 winze, has been extended for the month 18 ft. 3 in.; we have a good lode of grey copper ore in this end, worth 24/ per fm. We have stopped stoping over the 82, south of No. 1 winze, and below the 70, north of No. 1 winze, until we get the ore to surface, as all the copper ore broken from these stopes for the last month is now under ground. The stopes over the 78, north of No. 1 winze, are looking well; the lode of copper ore is 18 in. wide, and the 70, north of No. 2 winze, is extended for the month 14 ft. 6 in.; the lode is large and kindly, mixed with copper ore, but not worth saving. In the tribune pit below the 70, north and south of No. 2 winze, there is a good grey lode 3 feet wide. In the stopes over the 70, over No. 2 winze, the men have stoped 3 fms. 4 ft. 6 in., and have a good grey lode 2 ft. wide, and 4 fms. long. We have stopped stoping on tubwork, and intend to set two new tribune pitches, at 6s. 8d. in 1/2. We never saw the mine looking better than now.

**PENHALDARY.**—T. Hodges, Jan. 19: At the engine-shaft we have cased and divided the shaft from the 20 to the 30, cut plat, put in penthouse, and resumed the sinking of the shaft yesterday. In the 30 plat we have cut into the lode about 9 feet, which is composed of spar, manganite, and good stones of lead—a promising lode. In the 20 south we have cut into the lode about 6 feet, which is unproductive; the rise in the back of this level is communicated with the winze, which has thrown good ventilation into this level. In the 20 north I have put the men to rise against Mitchell's winze, in order to ventilate this level; the present end is in tribune ground; stopes in the back of this level, north of Trause's winze, will produce 7 cwt. of lead per fm.; stopes south of Trause's winze will produce about 5 cwt. of lead per fm. Mitchell's winze, sinking below the 10 north, is suspended in consequence of foul air, being below this level 6 fms. 12 ft. 6 in. We sampled last Saturday a parcel of lead, computed 15 tons. I beg to remark that we have left out full 4 tons, which could not be pressed in time to sample.

**POLBREEN.**—Jan. 15: The ground at Dorcas's shaft is harder than when I wrote last, with more water, and the greatest part flowing from 3 fms. to 4 fms. from the bottom of the shaft, making very much against the sinking; but the shaft being down about 10 fathoms from the 32, we have set the men to drive north to cut into the lode, which we calculate is close at hand, in order to let down the water, after which we shall be able to sink a little more for a fork and a trip-plat. The 32 east is somewhat improved, but I can hardly call it paying ground yet; it is also better for driving; we shall now begin to rise towards the winze, which is about 8 fms. below the 22. The lode in the 32 west is also improved; it is yielding some good stones of tin, and is about 1 foot wide, almost all saving work, but not rich. There has not been any lode taken down in the 22 east for the past month; the end has been driven in kilbas, and having but little air, we put the lode about 6 feet, which is unproductive; the rise in the back of this level is communicated with the winze, which has thrown good ventilation into this level. In the 20 north I have put the men to rise against Mitchell's winze, in order to ventilate this level; the present end is in tribune ground; stopes in the back of this level, north of Trause's winze, will produce 7 cwt. of lead per fm.; stopes south of Trause's winze will produce about 5 cwt. of lead per fm. Mitchell's winze, sinking below the 10 north, is suspended in consequence of foul air, being below this level 6 fms. 12 ft. 6 in. We sampled last Saturday a parcel of lead, computed 15 tons. I beg to remark that we have left out full 4 tons, which could not be pressed in time to sample.

**PRIDEAUX WOOD.**—F. Gill, P. Rich, Jan. 17: In the 64, driving east of Kendall's shaft, on Kendall's lode, the lode is small and unproductive. In the 54, driving east of Kendall's shaft, on the same lode, the lode is 2 ft. wide, producing a little tin, but not sufficient to value. In the 24 east the lode is small. In the add driving east of Lawrence's shaft, on Kendall's lode, the lode is 2 ft. wide, producing saving work for copper ore. The ground easy for driving. In the 10, above the add, driving east of Bowden's shaft, on Kendall's lode, the lode is 1 ft. wide, producing saving work for copper ore.

**REDMOOR.**—T. Taylor, Jan. 18: In the 80 east, on Kelly Bray lode, we have intersected a sparry cross-course about 2 ft. wide, which we hope the lode; we are now driving to find the hoave. This cross-course at the 70 is about 4 fathoms west of the ground cross-course. In the 80 west the ground is more favourable for driving, and the lode a little larger, containing spots of yellow copper ore. The winze in the bottom of the 80 is yielding about 1 ton of copper ore per fathom.

**RHEIDOL.**—Capt. Ridge, Jan. 15: In Rathdu deep adit level the lode is from 2 feet to 3 feet wide, of spar, blende, and small stones of lead occasionally. In Rhrurrguss deep adit level the lode is from 12 to 18 in. wide, of spar, blende, and lead occasionally, but not to value. In mid-way level, driving west, the lode is from 12 to 18 in. wide, of solid blende. In No. 1 stop, east and west of No. 2 rise, the lode is from 5 to 6 ft. wide, composed chiefly of blende and spar. In No. 2 stop, west of No. 2 rise, the lode is 2 feet wide, nearly all blende. In No. 3 stop, west of No. 2 rise, the lode is 9 ft. wide—solid blende. In No. 1 stop, east of No. 1 rise, the lode is 1 ft. wide—solid blende. Rhrurrguss Upper Workings: In the 10, driving west, the lode is from 3 to 4 ft. wide—2 ft. of solid blende. In No. 2 stop, west of No. 3 rise, the lode is 18 in. wide—solid blende. In No. 2 stop west the lode is from 18 in. to 2 ft. wide—blende. In No. 3 stop east the lode is 18 in. wide—blende and lead.

**ROSEWALL HILL AND RANSOM UNITED.**—P. Roach, Jan. 19: Ransom: The lode in the 80, west of the Ransom engine-shaft, is worth 6/ to 8/ per fathom. The lode in the 40, east of the whim-shaft, is worth 7/ per fathom. The 50, east of same shaft, is poor. The 60, east of ditto, is worth 20/ to 25/ per fathom. The 70, east of ditto, has yielded some rich work, but is not now so good. We shall be in a position to drive the 80 in the same direction in a day or two, the dip of tin being east. The 70 and 80 are not quite far enough advanced to reach the tin ground under the 60. No lode has yet been cut in the 30 north, on the tram. This section of the mines may now be said to be almost in a regular course of working, with the exception of the sinking of the engine-shaft, which we think should not be done as a communication is effected with the engine-shaft in the 80; and in order to expedite the discharge of stuff, and enable a more vigorous working, we are now busily engaged in getting another kilbas to draw from this part of the mines.—Rosewall Hill: We have still whole ground in the 80, east of the engine-shaft; lode 1 ft. wide, easy but not rich. We are making pretty good progress in going down, having cleared up 2 fathoms of the engine-shaft below the 100 since last report. We hope to set the 100 to clear east of the said shaft below tomorrow; it is in this level we expect to find the carbons (about 40 fathoms east of the shaft) which yielded so immensely to the former workers, and it is said to be the

first one that was met with in the neighbourhood, now about 55 years ago, but which was worked at one level only, its nature being the same and richness equal to those that have been since cut in the adjoining mines—the St. Ives Consols and the Providence Mines, and which are now causing such sensation in the locality, upwards of 6000 worth of tin having been broken (and just sold) from one in the former by two men and two boys in a week; and the latter 1 am told are now about to sell 40 tons of tin, the produce of a month, and nearly all from one or two similar deposits. As we are now raising a pretty large quantity of tin-stuff (although, comparatively speaking, but little whole ground has been met with), we purpose getting our tin floors in readiness with all possible speed. Our new plunger-lift in the 100 works well.

**ROSETRIDGE CONSOLS.**—J. Richards, Jan. 20: In the 86, west of Hitchen's engine-shaft, the lode is becoming larger; it is from 4 to 5 ft. wide, and promising, being composed of capel, quartz, manganite, and fine stones of ore. No other alteration.

**SOUTH CARADON WHEAL ROOPER.**—W. C. Cock, Jan. 15: The cross-course in the 62 cross-cut north is much harder than I expected to find it before we commenced driving on it; consequently our progress in that direction is likely to be slower than anticipated from the nature of the ground on No. 3, east in this level; it was found necessary to enlarge the end, so that but little has been done on the lode. The shaftmen are getting on as fast as possible.

**SOUTH CARN BREA.**—T. Glanville, Jan. 18: There is no alteration this week.

**SOUTH CLIFFORD UNITED.**—The engine-house and stack are complete, and the engine is being lifted in, and it is expected to be ready for work in a month.

**SOUTH DOLOCOATH AND CARNARTHEN CONSOLS.**—William Roberts, Jan. 18: Nothing new since last reported.

**SOUTH LADY BERTHA.**—Wm. Goss, R. Unsworth, Jan. 20: In the 40, driving south on the cross-course, the ground is very easy for exploring, being composed of fluor-spar, sulphuric manganite, flookan, and small spots and strings of lead ore. As we get off from the east and west lodes I have no hesitation in saying this north and south course will become productive of silver-lead ore. In the rise in the back of the 40 the men are taking down the lode, which is producing good work for copper ore, and the men are making good progress. We have commenced to clear the 30 so as to sink against the rise coming up from the 40; this being done the mine will be well ventilated, and these tribunes will at once go to work in the 40. In the winze sinking below the add the lode is from 3 1/2 to 4 ft. wide, with two well-defined walls, and producing good stones of rich ore, with a quantity of manganite, but the copper ore is not enough to save. We are dressing, and shall sample at the end of this week. The drawing-machine works well, and in ten hours 150 kilbas of stuff can be drawn. All other things on the mine are progressing satisfactorily.

**SOUTH PENHALDARY.**—Thos. Hodge, Jan. 19: The engine-shaft is below the 90 about 2 fms. In the 20, driving north on the 40 east part of the lode, it is 9 in. wide, composed of soft spar, prill, manganite, and good stones of lead, looking promising for further improvement. We calculate we have about 18 fms. more to drive to reach the junction of lodes, and by present appearances we may reasonably expect some good results soon.

**SOUTH PHENIX.**—James Barkell, Jan. 13: Since your last general meeting, on Nov. 24, the engine-shaft has been sunk about 2 fms. 4 ft., making it about 8 fms. 4 ft. below the 142. This has been accomplished in a little over four months; but the shaft being a little harder our progress at present is not quite so good. The ground in the shaft is more congenial for ore than I have yet seen it, there being more peach mixed up with the granite, and occasional strings and branches passing through it, producing spots and strings of rich yellow ore. The branches are nearly perpendicular, and appear as if they were dropping into some lode to the north of the shaft. The 142 cross-cut has been driven towards Greenhill's lode about 2 fms., making it altogether about 13 fms. from the shaft; and there remain to be driven a little over 4 fathoms to intersect the lode. The ground in the end is not so hard as we have had it, and there is a little water oozing through it, which causes me to think we are near another branch. I would advise that the cross-cut be pushed on with all possible speed, as we have a threefold object in doing it. First, to ascertain whether the great Trelawney lode will form a junction with the lode in this level, which it will do if it continues the same as it was from the 110 to the 126 fathoms. Secondly, to intersect Greenhill's lode, when we may reasonably expect to find it producing ore in remunerative quantities, seeing the lode was so kindly in the level above; and, thirdly, to make a communication with the winze that is partly sunk from the 126, in order to cause a circulation of air. In conclusion, I beg to say that I think in a few months more we shall be in a much better position, seeing that the engine-shaft will be down 32 fathoms deeper than we have yet seen the lode; and the ground in the shaft having changed for the better, it is my firm opinion that the lode will also improve, and be productive at that level.

**SOUTH WHEAL TOLGUS.**—Jan. 15: Youren's Lode: At Mitchell's engine-shaft, sinking below the 110, the lode is 2 ft. wide, producing occasional stones of ore, but not to value. In the 110 east the lode is small and unproductive. In the 110 west the lode is 10 in. wide, producing stones of ore, but not looking so well as when last reported on. In the 110 west, on the canter, the lode is 8 in. wide, yielding 1/2 ton of ore per fathom. In the 110, west from Mitchell's, driving east on the canter, the lode is 1 ft. wide—poor. The two stopes in the back of the 110, west from Mitchell's, are yielding each 2 1/2 tons of ore per fm. The lode in the 100, west of Mitchell's, is small and unproductive. In the winze sinking in the bottom of the 100 west the lode is 10 in. wide—poor. The three stopes in the back of the 100, west of Mitchell's, are each yielding 3 tons of ore per fm. No lode has been taken down in the 90 west since last reported. We have holed the winze in the 90 east, and the lode in the 90, which has given good ventilation. We have put the same pair of men to cut winze plat in the 90 east, on the south lode, preparatory to sinking a winze in the bottom. The winze sinking in the bottom of the 90, further west than the one mentioned above, has been holed; the lode is 1 foot wide, producing good stones of ore, and has a promising appearance.—South Lode: In the 110, west of Mitchell's, the lode is 2 1/2 feet wide, producing good stones of ore, and is very promising for further improvement. The lode in the 100 east is small and poor; the same remark will apply to the 90 east. The lode in the winze sinking in the bottom of the 78 east is 15 in. wide—poor. Our tubwork levels and winzes are looking very poor just now, and have been for the last few days or so.

**ST. AUSTELL CONSOLS.**—R. H. Williams, Jan. 15: The 45 cross-cut has passed through the horse, or division of lode, between the eastern and western pieces of the elvan; I did not expect to cut the lode before we cut through the western piece; this I expect we shall get through in a few days, unless it is larger than I anticipate it to be. Our prospects in the 35 are very cheering; the lode looks well. According to promise, I now enclose you the tin bill; not only the largest sale of tin we ever made, but also the greatest amount of money. I hope to report good news next week.

**SUNNY RIDGE.**—J. T. Bell, Jan. 20: Having stopped the shaft last week on account of making a little water, I have, as stated in last report, placed a full staff on the adit, and are now getting on very well. In about a fortnight the adit will reach the shaft, and perhaps a little beyond, when, should the adit have the effect of draining the shaft, we shall immediately recommend to sink the latter and get it holed as soon as possible. We shall put in 15 or 14 fathoms of air-boxes to-morrow, which will improve the ventilation sufficiently, and enable us to hole the shaft.

**TAVY CONSOLS.**—W. Goss, Jan. 17: We are driving the cross-cut in the 56, and expect to reach the lode in 5 fathoms. The 46 cross-cut is also being pushed on to come under the horse, or division of lode, between the eastern and western pieces of the elvan; I did not expect to cut the lode before we cut through the western piece; this I expect we shall get through in a few days, unless it is larger than I anticipate it to be. Our prospects in the 35 are very cheering; the lode looks well. According to promise, I now enclose you the tin bill; not only the largest sale of tin we ever made, but also the greatest amount of money. I hope to report good news next week.

**TINCOFF.**—Capt. Teague, Andrews, and Cock, Jan. 18: Highburrow lode in the 173 fm. level, driving east of Martin's east shaft, is 3 ft. wide, worth for tin 20/ per fm. In the 173, driving west of Martin's east shaft, the lode is 3 feet wide, worth for tin 12/ per fathom. In the 162, driving east of shaft, the lode is 3 ft. wide, worth for tin and copper 16/ per fathom. In the 152, driving east of shaft, the lode is 3 feet wide, worth for tin and copper 18/ per fm. We are not taken down the lode in the old dump-shaft since last reported. In the 162, driving west of old dump-shaft, the lode is 2 1/2 ft. wide, worth for tin 10/ per fathom.—Chapple's Lode: In the 120, west of Downright shaft, the lode is 2 feet wide, worth for copper ore 12/ per fathom. There is no alteration in North Tincoff since last reported on. The stopes and pitches throughout the mine continue to yield fair quantities of mineral.

**TOLCARNE.**—Jan. 15: Field's shaft was set yesterday to cut down by nine men, at 11/ per fm.; the ground cut last week was 2 fms. 1 ft. 10 in. The adit end to drive west on Field's lode by four men, at 6/ 6s. per fm.; the lode in this end is 10 in. wide, and is worth for copper ore from 10/ to 12/ per fm., and is not looking quite as good as when last reported.

**TRELVON CONSOLS.**—G. Higgs, Jan. 19: The lode in the 20 west was taken down yesterday, and is now valued at 40/ per fm. for tin.

**TREWEATHA.**—T. Richards, W. Rowe, Jan. 19: The 90 end north is worth 3/ per fm. The same level south is without change. In the 50 north no lode has been taken down since last reported. The stopes are turning out much the same as for some time.

**VALE OF TOWY.**—Thos. Harvey, S. Harper, Jan. 18: The lode in the 70, north of Clay's engine-shaft, is 3 ft. wide, composed of gossan and spar, with a small quantity of blende, but not to value. The lode in this level south is 2 1/2 ft. wide, as last reported, producing saving work. There is no change in the 60, north of this shaft. The lode in the rise in back of the 60, north of Field's shaft, is 4 ft. wide, producing 8 cwt. of lead per fm. The lode at Field's shaft, sinking below the 50, is 3 ft. wide, producing 7 cwt. of lead per fm. The lode in the stopes in back of the 50, south of this shaft, is 3 ft. wide, producing 10 cwt. of lead per fm. The lode in the 40, south of said shaft, is 1 ft. wide, producing a little lead, but not to value. The lode in the 60, north of Bonville's shaft, is 3 1/2 ft. wide, as last reported, producing from 16 to 17 cwt. of lead per fm.; the same may be said of the south, producing from 16 to 17 cwt. of lead per fm. We hope to get the skip-road to this level by the end of the week. No change in the 50, north of this shaft. The lode in No. 2 winze, sinking below the 40, north of said shaft, is 3 ft. wide, producing full 1 ton of lead per fm. No change in any part of the mine.

**WEST ALFRED CONSOLS.**—S. Lean, R. Stevens, Jan. 18: The lode in the 85, west of flat-rad shaft, is 4 ft. wide, and assumes a more promising appearance for ore than for several months past; the north part of it, for about 1 ft. wide, is ore throughout, with a prospect of further improvement. The lode in the 65 west is also looking a great deal more promising for copper, and the ground more favourable, and as we are getting under the ore gone down in the level above we anticipate something very good here shortly; we have a good lode of ore in the back of this level, east of No. 6 winze. The lode in the 55, west of the last-mentioned winze, is worth 25/ per fm.; the stopes in the back of this level have been desuing the lode in the past month, they will now commence to take it down. The ground in the 95 cross-cut north has been very troublesome for driving; we hope we have got through the worst of it.

**WEST SHARP TOR.**—W. Richards, Jan. 17: The cross-cut in the 125 is extended into the lode 14 ft., but no appearance of the south wall as yet. The part now being cut into is composed of iron, quartz, and grey and yellow copper ore. The lode in the 110 is a little more of some fine stones of ore, but it is no better for progress. The 110 west is being continued by the side of the lode in elvan. Enclosed I beg to hand you copy of setting for the current month.

**WEST TOLVADEN.**—C. Thomas, Jan. 17: We commenced to draw water from the shaft with the horse-whim on Saturday, and expect to have the water out in a day or two, when we shall commence sinking on the lode at the shaft, and proceed with the 20 on the course of the lode east.

**WEST TRELVAN.**—J. D. Osborn, Jan. 15: We have cut into the lode 7 feet in the 29 east of Cater's, on Park lode, but have not yet reached the south part; lode composed of spots of grey and green carbonate of copper ore—a very promising lode, but not to value. As soon as we cut through the lode we shall begin to sink to the 28, to let down the water, and for ventilation. We have put two men to assist to hole this piece of ground against the winze from the back of the 28, and have this day broken some fine stones of grey copper ore in bottom of the 28, about 30 fms. east of Cater's, but cannot put men to work on it until the winze is holed. We hope to get the flat-roads to work as soon as anticipated.

**WEST WHEAL JANE.**—J. Tonkin, J. Tregoning, Jan. 14: We have this day set out tubwork bargains about the former prices, and the tribute pitches at a little lower

tribute than last month. There is no change to report in any of our tubwork bargains since your general meeting. Our tribute pitches are producing about the average quantity of tin-stuff: the next sale will realise about 150/. The machinery is in an efficient state of working, and our prospects much the same as they were a month since.

**WHEAL ADDAMS.**—R. Moore, Jan. 11: In the Mining Journal, in December last, you will find a remark made by some gentlemen, stating that in times past many conflicting statements have been given of the value or prospects of this mine, the party seemed glad that some disinterested person was to be sent to inspect it, in order to set the matter at rest, or give the public a true and particular account of the real state of the mine; and, in the Journal of Jan. 1, Capt. Joseph Nicholls, of Frank Mills, seems to be the man selected, whose report is to appear in Mr. Murchison's Review. Now, of course, I cannot tell what he has said in his report, but I hope to see it shortly; however, let me inform you my real belief is that the whole of this sham originated in some man's minds in order to throw a damper on the mine, and to furnish some publication in London with new materials to make sale of the same. I most sincerely protest against such conduct as this for certain reasons—First, all the lodes have been much tumbled over near the surface, the old floors of the mine laid down right over the backs of those lodes; and, after heavy rain, almost all these old levels are much tried with water. Therefore, I say there never could be a worse time for such inspection, however honest the man might be who was sent to make the inspection; but I say plainly Mr. Joseph Nicholls is not the man who should have been selected; he may suit a few with whom he is intimately connected, but I am certain that if he had to be chosen by practical miners they would never have sent him. How long has he been held up as a good judge of mining, or of the value of mineral lodes, or even considered to be a good manager of mines? This question ought to be answered fully before great credit is given to statements made by such men. Wheal Addams will bear any honest investigation, underground or at grass.

**WHEAL AGAR.**—W. Roberts, Jan. 18: In the 60 east the lode is 4 1/2 ft. wide, the north part, producing 1 1/2 ton of ore per fm. In the 60 west there is no alteration.

**WHEAL ARTHUR.**—T. Carpenter, Jan. 17: We have driven the 40 cross-cut 11 fms. 5 ft. south of flat-rad shaft, and no signs of the lode in the end. I have put the men to drive west on a branch we passed through in the cross-cut, 7 fms. 1 ft. south of shaft, and 4 fms. 4 ft. from the present end. This branch is 8 in. wide, and underlying 7 in. in a full-on north towards the shaft; it contains manganite, capel, spar, and spots of copper ore. It is very likely the lode is split or divided into branches, as we are not more than 6 ft. west of cross-course, where this branch is intersected. The north lode in the 20 above add is 2 1/2 ft. wide, worth 5/ per fm.—South Lode: In the add level west we have driven north 6 ft., but not yet cut the lode. The lode in the add level east is worth 6/ per fm.—Murry's Lode: The lode in back of the add west is 2 ft. wide, and will yield 2 tons of good copper ore per fm.—Eastern Mine, Old Lode: The lode in the 20 east is 2 1/2 ft. wide, unproductive.—North Lode: The lode in the 20 east is 2 ft. wide, poor. The lode in the 20 west is 3 1/2 ft. wide, composed of spar, capel, manganite, and stones of copper ore. The lode in Palmer's sink and stop, in bottom of add west, is 5 ft. wide, worth 8/ per fm.

**WHEAL GREBOR.**—J. Giffard, Jan. 20: In the 12, under the Tunnel, east of Walter's winze, the lode is much the same as last reported, being about 20 in. wide, and producing some very good stones of rich ore; we have broken from the present end some fine specimens of rich quality ore. No other alteration to notice.

**WHEAL EMMA.**—W. Goldsworthy, Jan. 20: The shaftmen continue cutting trip-plat, which will be complete in a few days. In the 58 east we have driven on the course of the lode about 12 feet, and the furthest point east has now the best appearance, from which fine stones of yellow ore are being broken, of exactly the same character as the level above, and we daily expect greater improvement as we proceed; driving at 55s. per fm. In the 46 west we are still cutting in south through the capels, in hopes of meeting with better ground for driving; it is producing good stones of tin. In the 46 east we have commenced driving, and carrying about 4 feet of the footwall part, which produces fine stones of yellow ore; driving at 55s. per fm.

**WHEAL CHARLOTTE.**—R. R. Mitchell, Jan. 19: We are looking better here than we have ever looked before. The 60 fm. level cross-cut is in the lode 2 ft., composed of manganite, blende, and spots of ore, and not through it yet. The 50 end is now worth 16/ per fathom, and improving fast. A pitch set at 2s. 6d. in back of this level, No. 1 winze, sinking in the 40, is worth 2 tons. The stopes in the back of the 40 are worth 30/ per fm. No. 2 winze, in the 40, is worth 2 tons.

**WHEAL EDWARD.**—M. H. East, Jan. 15: The lode in the 82 east is 2 ft. wide, and contains more manganite, peach, quartz, &c., and as the end is approaching the first run of ore, and the east of the shaft I anticipate the lode will shortly change for the better. The lode in the 82 west is 4 feet wide, producing some rich ore; for about 1 1/2 foot from the bottom of the end there is a very promising lode, and when compared with the shallow levels bespeaks something of importance. There has been no change taken place in the 71 and 52 west worth mentioning. The 52 is still a very wet end.—South Lode: The ground at the pump-shaft is rather spare for sinking; at present sinking by the side of the lode. The lode in the 71 east is 3 ft. wide, composed of capel, spar, and copper ore, worth about 1 1/2 ton of ore per fm. No lode taken down in the 71 west. The lode in the 61 east is 4 ft. wide, but is not so productive as when last reported on, but is, nevertheless, a strong promising lode. We have commenced driving the 60 east; the lode in this is yielding good saving work, and likely to improve. The lode in the different stopes has fallen off a little since last valued.

**WHEAL GRENVILLE.**—G. R. Odgers, Jan. 15: I have no very material alteration to speak of since my advice for the general meeting. The men are making good progress in sinking the engine-shaft. In No. 1 cross-cut the ground is a little easier, and the water continues to flow plentifully, and I have seen this week greens on the smooth surfaces of the granite, which proceeds from the water being coppery. In the 66 west the lode is about 15 in. wide, composed principally of quartz, very regular and kindly.

**WHEAL HARRIETT.**—J. Williams, Jan. 15: The canter lode in the 100 east end is at present small, and very much disordered with the cross-course. The canter lode, in the winze sinking below the 90, is 6 in. wide, producing stones of copper ore. The main lode in the 90, east end, is small and poor. The main lode, in the 74 east end, is 1 foot wide, producing stones of ore. The main lode in the stopes below the 74 is worth for copper ore 30/ per fm. The main lode in the deep adit east is 1 foot wide, producing good stones of ore, but not sufficient to value. The main lode in the stopes below the deep adit is worth 1 1/2 ton of ore per fm.

**WHEAL LUDCOTT.**—R. Knapp, Jan. 19: Willcock's shaft is sunk 3 fms. under the 50, and the men at present are engaged in cutting ground for bearings and elstern. The lode in the 50 north is 2 feet wide, and will produce 8 cwt. of lead per fathom. The price for driving this end is 50s. per fathom. The stopes in the back of this level will produce on an average 7 cwt. of lead per fm., and the average price of stoping is 16s. per fm. The lode in the 40 south is 1 ft. wide, and will produce 6 cwt. of lead per fm. The price of driving this end is 35s. per fathom. The winze sinking under this level will produce 5 cwt. of lead per fathom, and the price of sinking it is 3/ 10s. The stopes in the back of this level will produce on an average 6 cwt. of lead per fathom, and the average price of stoping is 39s. per fathom. The stopes in the back of the 30 are worth for copper ore 30/ per fm. The main lode in the deep adit east is 1 foot wide, producing good stones of ore, but not sufficient to value. The main lode in the stopes below the deep adit is worth 1 1/2 ton of ore per fm.

**WHEAL MARY EMMA.**—J. Seccombe, Jan. 10: Agreeably with your instructions, I have inspected the above mine, and beg to furnish you with the following report of the same. The sett is a very extensive one, and embraces several lodes, four of them being within a distance of 40 fms. on the east side of the river. The back of these lodes have been extensively worked away above the adit level by the ancients, probably for tin. The present company have confined the principal part of their operations in the eastern part of the sett to clearing and securing adit, the greater part of which has been driven on No. 3 lode; and in sinking Lane's engine-shaft below this level for about 1 1/2 fms., making the depth from surface about 13 fms., the lode in which is of a very promising character, averaging about 15 in. wide, yielding tin, and strong spots of yellow copper ore. I should advise you to continue the sinking of this shaft, as by so doing you will be proving this as well as another lode, No. 2, which is south of this lode, and underlying north, consequently would come into this shaft about 12 or 14 fms. below the adit level; at this junction something productive may reasonably be expected. At the point where this shaft is being sunk the strata, which is kilas and granite, forms a junction; this is generally considered to be a very favourable feature. A



In regard to the affair of OLD TOLGUS, which has during the week been the all-absorbing topic of conversation, the plain facts of the case, as we shall confine ourselves to them, appear to be these:—The mine is under the management of a committee, with Mr. Charles as secretary, and conducted on the Cost-book Principle, with a set of rules for its government. One of the rules states that the majority of votes at general meetings shall be binding upon all shareholders, whether present or not. Another, that no change in the constitution of the company shall be made except by resolution of a SPECIAL general meeting, convened for the purpose. The meeting held last week was, it appears, a mere ordinary meeting, but a proposition emanating from the committee, to create 600 new shares, at 5*l.* each, was carried in a meeting representing the majority shares in the mine—with only one dissentient, a professional gentleman with one share in his name—who entered a protest against all the resolutions. Mr. Watson, who was originally in favour of the more legitimate course of making a call, gave way to the general feeling of the meeting, supposing that the plan recommended by the committee had been brought forward in accordance with the rules of the company. On Monday morning, the shareholders in the mine, and many others who never held a share at all, received a written notice from a legal firm in the City, to the effect that a bill was about to be filed in Chancery, and an injunction obtained to prevent the issue of the new shares. The effect of this most extraordinary and unusual course may be better imagined than described. The committee, we understand, upon receiving notice, were at once willing to call a special meeting, and carry out the resolutions <sup>if legal</sup> for the meeting, or to rescind them altogether, if it should be the wish of the shareholders to do so. Notwithstanding this, however, the bill, as we are informed, has been filed, and a copy prepared for every shareholder, so that very considerable costs have been incurred. The mover in this proceeding said to be one of the largest shareholders from the commencement of the mine, and one whose name appears signed to most of the resolutions and operations of the late management, and that this mode of depreciating his own property, and annoying shareholders, the majority of whom have only joined the mine under its present management, and knew nothing of his former career, has been adopted through personal feeling towards the late manager, and because some 41 shares, upon which, it was stated at the meeting, he had paid 1600*l.*, were restored to him. We believe we have now placed before our readers the plain facts as we have been able to collect them; and it only remains for us to say, that no event which has happened to the mining world for years past has created more sensation, more universal condemnation. It is not looked upon as a case simply regarding Old Tolgus, but one the principle of which affects the whole mining interest. If it be established as a precedent, that one shareholder or his advisers, to gratify personal feeling towards one individual, can thus



West, which closed Wednesday, made a call of 78.6d. per share.

receipts for admission to the last exhibition were greater than on any previous occasion 4127. 10s. 5d. had been received during the year, the disbursements being 3837. 11s. 7d. The subject of letting the hall was discussed, when, in order to remove the difficulty and conscientious scruples of several active and working members of the committee, it was unanimously resolved to let the hall to a responsible party for 12 months, and a sub-

Rowing	Corrected	Time	No.	Time
No. 1	2	327 16 10	No. 7	24752 5
" 2	2	4619 12 10	" 8	27388 10
" 3	2	1817 4 4	" 9	27900 10
" 4	4	1472 14 10	" 10	1478 10
" 5	8	973 14 3	" 11	163 15
" 6	2	2418 14 2		
<b>Total</b>				<b>423,541 15</b>



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## Notices to Correspondents.

Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

**OLD TOLGUS UNITED—THE BILL IN CHANCERY.**—Please reply to the following queries in your Notices to Correspondents:—

1.—What effect will the filing of a bill in Chancery have upon the future working of a mine? I refer to the Old Tolgus United Mines. Must the operations of the company necessarily cease until the opposition is removed, or does it merely affect the proceedings of the meeting last week as reported in your Journal?

2.—Should the shareholders agree to some other plan of raising the money, will any great expense have been incurred by filing the bill? and who will have to bear the expense?

3.—Cannot individuals be compelled to pay their calls in any given time decided upon by the majority of shareholders?—**QUEKIST.**

1. The mere filing of a bill in Chancery against a mining company does not stop the operations of the company in any way, neither must its operations necessarily cease. It does not affect the proceedings of any meeting or transaction to which the bill refers. The reason is that the filing of the bill is an act that may be done by any one without sufficient or legal grounds for so doing. If, however, the bill should be prosecuted to a decree, then such decree will bind the company according to the tenor of the decree. 2. The expenses of a bill in Chancery fluctuate with its length and other circumstances, but it must be a very stiff bill to cost 30l. The person who files the bill must pay its expenses, unless by decree the expenses are ordered to be paid by the company or persons against whom the bill is filed, or it is compromised on terms. 3. Adventurers can be compelled to pay their calls in any given time decided upon by the majority of the shareholders. But to answer this query correctly, the cost-book rules or articles of association must be consulted, and the methods therein mentioned for proceeding against defaulting shareholders should be strictly followed.

**LEAD SMELTING.**—Your correspondent, "A," enquires if "A Lead Smelter" has supplied Mr. Tason with samples of lead ore, &c., which he offered to examine. In reply thereto, I beg to say that a number were duly sent some time ago, and the particulars supplied for communication, which Mr. Tason said would be necessary to hold during the examination, but since have not heard from him.—**A LEAD SMELTER.**

**REDUCTION OF POOR ORES.**—In all the processes undertaken by these gentlemen they in general forget the most paramount cost—that is, the expense of mining; their operations may be very useful in reducing poor ores when once they are to grass, but it is questionable whether it is of any utility to mine where the staff is so poor. Mr. Stirling's process has been adopted in Fiddli in Norway, and there found efficacious. For many years there have been lying there at grass large heaps of stuff which were too poor to be reduced by the blast-furnace as they were not worth the expense of fuel; these have now been utilised. The cost of mining is not there taken into consideration, but I am quite convinced that Mr. Stirling is aware of the large deposits of copper ores of from 1½ per cent. to 3 per cent. which exist in Romsdal, and might be successfully treated by his method. Why is this not done?—because the expense of mining would be too great in the first instance. In the same country I have seen in the interior, near the Dorreld, signs of ore of 60 per cent., but in such inaccessible places that the expense of getting the mineral would be greater than the value when reduced. In general, people here cheaply do as they please, and they are no persons who deceive themselves so much as projectors; they have no doubt of the feasibility of their schemes, but in the majority of cases they miscalculate the first cost. No one is more alive to their own interests than the copper smelters; how is it if they were at all practical that they have never adopted any of the patents of these economists? merely, in my opinion, because they have found them of no practical utility. Many of the new alterations in the furnaces are not patented; and, while on this subject, I may state that a double-bedded one, which has been in use in Germany for over 150 years, was lately trumpeted forth in this country as a new invention. The Mining Journal has drawn public attention lately to copper smelting, and a list of the several patents, with comments on them, have appeared in able articles on the subject; yet, while reading these with all due attention, I can perceive nothing that is likely to supersede the old mechanical method by reducing with fire, as now practised at Swansea. I am no enemy to improvement in copper smelting; I believe it is susceptible of some, but if this is to be effected it must be by practical men, and not by a set of empirics, who lay down rules and regulations on a subject of which they are not practically acquainted with the minutest details.—**B. S.**

**IN AUSTRALIA.**—I should feel obliged if some well-informed correspondent would state in what part of Australia tin is found in the largest quantity; what it is worth per ton there; what the freight per ton is to England, and the value per ton when sent home; and if there are any means of smelting it in Australia? A reply to this enquiry will oblige more than one in the Tin Trade: *Truro, Cornwall, Jan. 18.*

**TIN-PLATES OF PUBLISHED STEEL.**—Mr. Spence, of Liverpool, has made an application for a patent for making tin-plated plates of published steel, and his application is opposed by Mr. Clay and others. Six months ago I sent a small piece of published steel down into Wales for that very purpose, but I never had a report as to its efficiency, although there can be no doubt as to that. This I can at any time prove.—**R. M. D.**

**WHEAL VELVEY.**—Can any of your readers inform me where this mine is situated, the captain's name, and also the quantity of mineral raised in 1858, if any?—**W. TREGLASKIS.**

**CARN VIVIAN.**—In last week's Journal I observe a letter from a "Mining Student," stating that in Feb., 1857, Capt. Tregay, of Lostwithiel, predicted the discovery of lead near the 50 ft. level. I recollect Captain Tregay inspecting the mine, but was not before aware of his making the statement alluded to. Capt. Tregay certainly had a very high opinion of the north and south course as a lead lode, and even made an offer to work it for lead independently of the east and west lode. This north and south lode has not been seen below the 10, where it produced a considerable quantity of lead. Judging from its underlie at that level, it must now be about 15 ft. from the shaft; and it is considered by many that it will prove equally, if not more, productive than our present lode. Your correspondent speaks of Carn Vivian as a "puzzle." Certain parties who a few months ago depreciated the mine (in forcefulness of the old adage that "those who live in glass houses shouldn't throw stones"), are, doubtless, considerably "puzzled" at (to them) unexpected discovery. It is, however, no "puzzle" to those who were acquainted with the mine, and who had observed the regular and continuous improvement of the lode from the 10 downwards.—**OSWERN.**

**ROSE AND CANADA.**—The error complained of in your report of the proceedings of this company appears to have arisen from the omission of the word "only" in an answer to a question as to the amount of the liabilities of the shareholders, which, instead of "if 3000," was obtained for the plant and machinery the shareholders would be secure, should have been "if only 3000," &c., the statement not being made with a view of stating the value of the machinery, &c.—**B.**

**LADY BERTHA.**—"Argus of Plymouth" should not hesitate to append his name to such a statement as that forwarded, otherwise he must communicate with the secretary, at the office.

**MINING IN CHILL.**—According to the report published in last week's Journal, it appears that the reduction of ores by the Copalco Smelting Company has been retarded in consequence of the deficiency in a supply of sulphurets. Surely, if these cannot be obtained in sufficient quantities to flux the carbonates, which I presume must be the staple of the ores there, Mr. Thomas, with his great experience in smelting, could find some other flux. I perceive, likewise, that another company are shipping their last cargo of ores; this is greatly to be regretted. In the course of a few years the Chilian Republic will be intersected by railways; these will traverse the mineral districts, and open up vast tracts of rich territory, which, owing to the deficient means of transport hitherto in use, have been neglected. Within the last few days a prospectus has been issued of a railroad from Caldera to Tres Puntas. Here it is known that many rich mines exist; several of these are in the hands of natives, but there is not sufficient capital to work them. Without doubt Chill is the most settled of all the South American republics. The Spanish character is the same everywhere, and despite their boast of Castilian honour, they invariably show their Punic origin. In all transactions, therefore, it behoves those carrying on mining to be assured that the Chilian sets are good, and duly registered in the local courts. This may probably cause a trifling delay to adventurers, but they must remember the old proverb—"Safe bind, safe find."—**S. W. R.**

**SITHNEY WHEAL BULLER.**—The spasmodic manner in which the proceedings of this company are occasionally presented to the public is to me totally inexplicable. Why are notices of forthcoming meetings duly forwarded for your useful Diary, and why is not the same ingenuously evinced for the promulgation of all facts connected with this particular company, as is so readily shown in others similarly constituted? One of your correspondents drew attention to this fact a fortnight since, and enquired why periodical reports from this mine did not appear in your Mining Correspondence. Although there can be no doubt as to its bona fide character, yet a certain class, who look upon such proceedings with a sceptical eye, it affords an opportunity for reflective remarks.—**F.**

**QUARTZ REDUCTION COMPANY.**—I perceive that a meeting of this association is called for the 26th inst., to consider on the state of the company's affairs in California. Have we not had enough of this trifling? We all know our position there: the only hope we had was that Mr. Squire, by his treatment of the quartz, would be able to get gold where no one else could. I had no great faith in him, nor more than I have in any other of the precious metal makers. The Chairman, Col. Kennedy, however, has seen his invention practically tested at Waltham, and has borne testimony to its efficacy. Why, then, this delay? Why call us together again to receive a report proving that nothing has been done, or likely to be effected? Let us give Mr. Squire a fair trial, or at once wind-up the concern before we incur any further liabilities. As yet we have merely lost the amount we subscribed; and looking to the position of other gold companies, we must consider ourselves fortunate that we have escaped without having further contributions levied on us, to support a number of officials who have rendered us no return for the capital entrusted to their charge. The money expended there has, I believe, been legitimately employed; but still I cannot totally exculpate those who have deluded us by false promises, nor the individuals who, by their position, have given character to the reports which we now, to our cost, find have merely existed in the sanguine minds of those who were mainly interested in propagating them.—**G. S.**

**PATENT PROCESSES.**—May I again trespass on your Journal to remind Mr. Robert Oxland that he has no right to the discovery of the discovery of the separation of wolfram from tin, which was stated by some of your correspondents, on the authority of Dr. Percy, in a lecture delivered at the School of Mines, to be a species of plagiarism from Aiken's *Chemistry*. If I remember rightly, the charge was made nearly two years since; and, if not refuted, we can only imagine that in this case, as in others, the old proverb may be quoted, that "Silence gives consent."—**A STUDENT.**

**GREAT WHEAL VOR.**—Looking over the prospectus originally issued, and upon the good faith of which I and other shareholders invested our money in this mine, it is stated to the effect that the mines were worked at a considerable profit up to the time the former adventurers abandoned them. One of your correspondents recently stated that about 55 tons was the average yield for the last six or seven months prior to the abandonment. On first reading this I was led to suppose this produces might probably verify the assertions made in the prospectus. Seeking information at head-quarters, to dispel all doubt, I learn that with all the tin the old adventurers could by every possible exertion raise during that time, they did so at a very heavy loss, amounting to at the rate of many thousands a year. I would urge that to state the produce to be a certain quantity of ore, large though it may be, without adding the cost of raising it, is likely to induce a very erroneous impression on the minds of shareholders, who derive their information from your Journal. For instance, it is quite true that the present adventurers have raised from Great Wheal Vor over 40,000l. worth of tin. Very good, if we might only get the cost of the ore out of it, which has been over 155,000l., making a loss upon our operations of about 155,000l. We all know that mining is attended with uncertainty and consequent risk, even when legitimately pursued; but we are not yet prepared to allow such statements to pass without calling upon the parties who originated them for an explanation. I say, then, that the original directors, and they alone, are called upon, in the name of common justice, to come forward and explain to the shareholders how it was that the prospectus was allowed to be published containing statements, which had they examined the accounts and books of the old adventurers, and taken ordinary precautions, must have appeared then as manifestly incorrect as they do now.—**ONE OF THE SHAREHOLDERS.**

**OLD MINING COMPANY.**—The principal shareholder, and the landlord of the property, I beg to inform you that the sum of 3000l. purchased the mine, plant, &c. Not three months before that sale Mr. Glanville, one of the committee, received 5000l. as a balance for the engine. He was over there for some six months; reports were forwarded to London of the ore which was in sight. Capt. Champion, who was only appointed in January, stated that he had sampled ore to the value of about 1000l. I have never seen a sale of this, nor do I know whether the liquidation has taken place. Without attaching any blame to the persons connected with the company, I must say that in my opinion great losses have been committed. In justice to the old proprietors, the present purchasers of the property should be told the old shareholders to come in, so that possibly under other management they might be able to obtain a return of some of the money expended under the former direction.—**E. J.: Linc-street.**

**COPPER SMELTING.**—Much has been written upon this subject by several of your correspondents. The question, in my opinion, merely resolves itself into one of capital. The practicability of the reduction of the ores has long since been decided, through the able articles that have appeared in the Journal from time to time. The mysterious halo which formerly hung over copper smelting has been dispelled. The miner must first help himself before he ventures to compete with the smelter, and this he can never do while the present hand-to-mouth system continues. No mine can attempt to buy or smelt ores without capital, and if there were an associated body of miners to smelt, they would have to wait for their money, not on until it was converted into copper, which would be a great deal of time. Until such a radical movement as this takes place it is hopeless to imagine the occurrence of any change in the relative positions of smelter and miner.—**NEMO.**

**SOUTH CARADON WHEAL HOOPER—CAPT. SEYMOUR.**—Knowing that Capt. John Seymour is well acquainted with the operations and appearances of this mine in the last working, will he be good enough to state, through your Journal, what he thinks of the concern as an investment? Is there sufficient limits to warrant the outlay necessary for its proper development, and from what part of the mine does he fancy the produce will be found? Will it be deeper in the granite east or west of the shaft, or are there chances of finding copper in paying quantities in the killas on either of the lodes, if levels are properly extended? As Capt. Seymour is generally ready to give his opinion on matters relating to practical mining, I trust he will at his convenience answer these questions, and oblige L. T.

**BIBLIOTHEQUE DE L'ECOLE DES MINES.**—La collection de l'Ecole des Mines à Paris reste toujours incomplète des numéros suivants du *Mining Journal*. Messieurs nos abonnés qui possèdent des doubles de ces numéros sont priés de les envoyer à M. le Secrétaire de la Commission des Annales des Mines, Quai des Augustins, 49, Paris: Nos 551, 557, titre et table des matières du 15e volume, 771, 801, titre et table des matières du 20ème volume, 851, 868, 871, 884, 886, et 891.

**GOLD QUARTZ VEINS.**—A theory has been frequently propounded that gold quartz veins can never be profitably worked, because, unlike tin or copper, they become poorer the deeper they are followed. May I ask, through your valuable Journal, the geological datum upon which this theory has been based? For although there is, perhaps, no probability of these veins increasing very greatly in richness in depth, as might be expected from tin or copper veins, neither can there be any reason whatever to suppose, as a rule, that they will die out, and the success of their explorations thereby become unprofitable. In support of the opinion that these veins do not suffer any appreciable diminution of yield within depths to which ordinary mining operations are prosecuted, Mr. A. E. C. Selwyn, the geologist of the Colonial Government, referring to land now in the occupation of the Port Phillip and Colonial Gold Company, has given it as his opinion that there is exceedingly good evidence that the upper portions of the gold quartz veins, which have been naturally removed by denudation, and now form the gold drifts, were far richer than any now found at the surface. To produce this result, however, it must be remembered that many thousands of feet of quartz veins were thus naturally broken up, crushed, and washed, and the fact of the veins still being frequently very rich at the greatest surface, which was at one time many thousands feet deep, goes far to prove that the decrease of value in depth, though true on a large scale, is a declension so gradual as not to be material within ordinary mining explorations. In testimony of the truth of this opinion, in exploring undulating tracts of land, the auriferous vein is frequently found as rich in the valley as on the hill, though both are now on the surface. As regards the original depth, they are, in reality, some hundreds of feet asunder. If any facts in relation to this question, which is as important as it is interesting, could be furnished by any of your scientific readers, they would, I am sure, be received with general satisfaction.—**L.**

**ACADIAN CHARCOAL IRON COMPANY.**—In reply to "An Old Shareholder's" letter of January 11, the amount of capital called up is now one-half of the sum named by him, in consequence of shares taken by the vendors in payment having since been relinquished. The price of blooms, 11l. to 12l., to which he alludes, should have been stated as local currency, being equal to from 8l. 16s. to 9l. 12s. sterling per ton. The Acadian charcoal pig would be so materially reduced in value by the use of coal or coke for its conversion into forged iron in this country, as to render it unadvisable to adopt such a course.

**WORTHING MINING COMPANY.**—In answer to "J. L." enquiry in your Journal of last week, I beg to say that if the writer is a shareholder he can obtain every information on applying at the office. I may state that the quantity of ore ground already laid open at the Bremer Mine renders the smelting works a most desirable acquisition to the company, the price of copper ore in the colony being only about 5s. or 7s. per unit. All ores of less than 7 per cent. are perfectly worthless, unless the company can run them down into regulus, and by the saving of freight and carriage make it profitable to ship them to England. We have some thousands of tons of ores of this quality, which can be immediately put into the furnace, and pay all the cost of the smelting works, for up to the present time we have thrown aside our lower quality ore, the 200 tons already raised and sold realising on an average above 19 per cent.—**GEORGE LAVINGTON: St. Helen's-place, Bishopsgate.**

**SAFETY LAMPS.**—"T. R." (North).—The lamp and machine-key alluded to were patented by Messrs. Robinson and Ogden, of Manchester, and described in the *Mining Journal* about two months since.

**ALLEN MINING ASSOCIATION.**—As an outlying shareholder, I should wish to enquire why hitherto no reports of the progress of the mines have appeared in the Journal. The cutting of the lode under the Old Mine, we were told, had given 20 years' existence to the property, yet it is strange that no further information has been afforded us. These delays have probably occurred through the stoppage of the mountain post; if such has been the case, it would have been but an act of courtesy on the part of the directors to intimate such to the shareholders through the medium of your columns.—**CARLOS.**

**LADY BERTHA.**—On reading Murchison's Review, I saw Capt. Thomas Richard's report of Lady Bertha Mine, in which he states the lode in the winze to be worth 14 tons of ore per fathom for 14 ft. long. Must the reader understand from this that the winze is 14 ft. at the bottom? If so, how many fathoms long is the winze 14 ft. wide? No doubt the question will meet Capt. Richard's eye; and probably he will answer it, as some assert that the bottom of the winze is not 14 ft. long, only 10 ft., and producing 16 tons of ore per fath. The directors or committee, to solve the difference of opinion, should send a man of their own.—**THURM: London, Jan. 21.**

• The MINING JOURNAL can be procured at our office by Eleven o'clock on Saturday morning. Newsmen, therefore, can make the necessary arrangements to have the Journal at the several stations in time to forward by the mid-day trains, enabling many of our subscribers to receive their copies on the day of publication.

## THE MINING JOURNAL

### Railway and Commercial Gazette.

LONDON, JANUARY 22, 1859.

Since we last week penned an article on the probable effect of a continental war on our MINING interest, those dark and threatening indications of strife and anarchy, by which the English and foreign markets were so agitated and depressed, have all but vanished from the political horizon. This is an event for universal congratulation. Its influence on European commerce will at the instant be beneficially felt, and should political sincerity on the part of those who rule the destinies of the people of Northern Italy, as also of other countries where the tendency to progress has been so long and sternly opposed, the act of grace in which Austria, now at the eleventh hour, evinces "deference to public opinion in Europe," such concession may be regarded as the beginning of that great end, PEACE, to which all experience of war directs the provident, the moral, and the wise. Old habits in the governing power are, however, not so easily relinquished; and the difficulty of restraining the ardent aspirants to popular liberty to the nicely graduated relaxation of coercive laws, which the political wisdom of the day may consider necessary, will very possibly retard for a lengthened period the complete pacification of the turbulent spirit which at this moment exists throughout the Austrian states particularly, and for which, it must be owned, there is an obvious and long-existing cause: therefore the commercial world, while holding jubilee on the disappearance of that hostile apparition by which it was so lately scared, should not repose too confidently on first appearances; and adhering for some time to come to great caution in their operations, remember that "one swallow does not make a summer," and that the hand which thus with such show of liberality looses the rein of Imperial Government to-day, may tighten it with a vengeance to-morrow, and throw all into greater suspense and agitation than before.

We make these observations for commercial purposes alone; and all that can be said or the subject is, if we are taxed with being somewhat ungracious to, and dubious of, sudden conversions to liberal policy, precedents can be referred to which will go to prove that words of peace must be guaranteed by acts before the confidence of trade and commerce can be given with prudence, and enterprise dependent on them carried on with safety. Having thus far remarked, as in duty bound, on the most important and most interesting event of the day, we consign the matter to the consideration of the great community whom this Journal represents.

The mining interest has now before it, whether there follows on the specific acts of France and Sardinia on the one side, and Austria on the other, as regards Italy conflict or tranquility—a future, the prospects which are lighted up by our national prosperity at the present period. Money is plentiful, the rate of interest moderate, and the reaction in favour of home speculation marked and steady, and, at the same time, cautiously progressive. The late fluctuations in the money and stock markets, emanating from shadows and ambiguous words, have aroused speculators to the uncertain tenure of investment in foreign securities, and "dabbling in the funds" has of late been to the majority anything but remunerative; therefore, as a natural consequence, the attention of the monied interest turns to that sphere of enterprise offered by our home industry. And if capitalists will only take the trouble to investigate thoroughly the advantages now offered by mining in this country; carried on as it is upon the most scientific principles, and conducted or "managed" with integrity and the most business-like care and attention—if they will only weigh in the balance the "chances" (we call them certainties) which are consequent on prudent mine investment, against the "operations" which of late years have been effected on the Stock Exchange by the general traffickers in "bulling and bearing," it will be found that mining yields more sterling profits, and affords a better security to the enterprising.

It may possibly be advanced by the class to whom these observations are addressed that want of information has hitherto been the cause of their neglect of this vast source of emolument; but, in reply to such an admission, we have only to point to the late Review of Mr. J. Y. WATSON, and to that of Mr. J. H. MURCHISON, now published. The former gentleman brings an experience of eighteen or twenty years to bear upon the mining interest; the latter has also a lengthened experience, and both have accomplished the literary labour of placing before the public an authentic exposition of the existing state of British Mining with great fairness and evident and undoubted honesty of purpose. To assist the moneyed and speculative community in making the best use of the references thus placed within their reach, and having on a former occasion alluded to the Annual Review of Mr. WATSON, we now refer to that of Mr. MURCHISON, and venture to say a work in which the acumen and sound judgment of the author are more evident was never offered to the public. The strictures it contains at the very onset on certain "market" practices, whereby great injury has been done, and which are calculated to lead investors astray, are written with point and spirit, and evidence very satisfactorily the independence of the writer. Having not unfrequently devoted an editorial column to severe animadversions on those who so injure the general interest by hazarding opinions based upon their selling and buying appreciation of these or those shares, and upon no real knowledge of the properties which such stock represent, we readily give place to a quotation from this Review, which suggests that all engaged "in a bona fide way in this important branch of national industry should use their best exertions to purge it from those disgraceful practices which inflict so much damage on the general interest." This expression of opinion will serve not only as a key to the object and intent of the reviewer, but also indicate the *moral* which we are happy to believe is fast pervading the mining market. Exceptions, however, to this principle will be soon discovered by speculators, and one may safely leave such delinquents—for late incidents have proved the punitive determination of the public—to their tender mercies. It is also well said, "No fortunes have ever been made by simply speculating in mine shares; it is the legitimate and persevering miner who has met with reward, of which there are many instances;" and this, again, is a valuable hint to investors, pointing as it essentially does to the safest issue of investment.

The very nature of mining requires perseverance, for upon the cautiously



scientific and economical development of a mine depends success, and all this requires time. It is no use buying shares one day and selling the next; the gain, if any, in such instances is generally insignificant, although some may be quoted where by the sudden discovery of rich deposits holders have in a few hours doubled their capital; still, as a general rule, capitalists are on the safer side who, "not keeping all their eggs in one basket," divide their "risk" between the dividend, progressive, and speculative mines, and acting, of course, on competent advice, which is at the present available to a very advantageous and considerable extent, *persevere* in their mining industry.

Although there has been a very considerable decrease in the dividends of British and Irish mines this year as compared with the last, the amount for 1858 being 338,543*l.* 4*s.*, against 467,122*l.* in 1857, leaving a difference of 128,578*l.* 16*s.*, the decrease is for the most part very clearly accounted for, and it is shown that the improvements calculated very confidently on in most of the dividend mines, together with the increasing value of the progressive and the cheering prospects of the speculative mines, authorise upon safe premises a high anticipation of very large returns during the ensuing eleven months. It is not our intention to devote a leader to a critique on this or the other Review, and reference is only now made so far as the matter contained therein bears upon that principle and practice which this Journal has ever advocated in favour of the mining interest; but it must be admitted, and we do so with much pleasure, the reports on various mines by experienced and practical inspectors which are to be found dispersed throughout Mr. MURCHISON's Review, constitute matter of great value and importance to the public, and while establishing the soundness of the author's views, place his work in the enviable position of being second to none.

It will not be deemed foreign to our approval of Mr. MURCHISON's literary production to revert here to the praiseworthy interest of presenting to Mr. WATSON a public proof of the high esteem which he so eminently merits for his long and consistent services in the cause of British Mining; and referring, at the same time, to a letter signed "X," which appeared in our Journal of Jan. 15, alluding to the scientific labours of Mr. ROBERT HUNT in perfecting the various operations in this department of labour, we may be permitted to observe that what may be termed the productive science of Mr. ROBERT HUNT is deservedly valued by the country, and will justly hand his name down to the latest record of British industry. His genius is *eni generis*, and none pay it sincerer homage than ourselves, but it cannot be forgotten that the tact, talent, and integrity of Mr. WATSON have mainly aided in forming a *Forum* for British Mining where labour receives its sterling recompense, and where the most important interests of the country are at once consolidated and protected. Mr. WATSON has done all this; Mr. MURCHISON not only lends him his valuable aid, but improves and embellishes that which he has constructed. Surely such men deserve in their sphere all the support and encouragement which Mr. ROBT. HUNT does in his; and it is no wise detracting from that gentleman's value to society to pay the tribute due to those who have ever given their support to the same cause. It is to a combination of such intelligence as each of these three gentlemen represents that England has to look for her moral greatness and her prosperity. All such are implements in the hands of Providence, who directs all; and the man who thus serves his fellow men will receive a reward higher than their estimation and more enduring than their gratitude.

The lectures at the GOVERNMENT SCHOOL OF MINES are progressing in a highly satisfactory manner, and impart a vast deal of useful information to the students who attend their delivery. It was never our intention to give them *seriatim*, but merely to select such as would tend to the information of the general reader, and at the same time afford some auxiliary aid to those who, from the force of circumstances, were prevented from attending the practical instruction of Jermyn-street. The lectures do not apply alone to the systems of mining and metallurgy as practised in the old countries of Europe, but the student is taught that in new lands, where the appliances of machinery, skilled labour, &c., do not exist, that he must in a great measure depend upon himself, and thus while all that has been done in the more ancient regions of mining is demonstrated, at the same time expedients are shown by which many difficulties may, to a certain extent, be overcome. In the metallurgical department, Dr. PERCY has afforded most valuable information, not only of the more scientific modes of reducing metals, but as well of the rude practices to obtain copper, iron, &c., which is still in use in semi-barbarous nations. Last year in the reports of the lectures we gave the methods of copper smelting as practised at Swansea, and Roraa, in Norway, as these were two opposite modes. Those who may be likely to be interested in the reduction of copper could not but find this information useful. Where coal can be obtained cheap, there the smelting as practised at Swansea generally has the preference, but in countries where this fuel is not to be obtained, then the blast-furnace, as used in Sweden, Norway, and some parts of Germany, is the only available plan to be adopted. As so much has lately been written about copper smelting, we merely cite this as an instance to show the utility of persons desirous of becoming either miners or metallurgists to be aware of all that has been previously performed in the sciences belonging to the profession they are about to adopt. Hitherto our attention has been chiefly confined to those lectures which purely treated of mining and metallurgy, but it is our intention to glance at some of the lectures delivered by the professors of the other sciences allied to mining. It is not to be supposed that the cursory notices we may be enabled to take will allow our readers without further study to become acquainted with all the details which are so ably and skillfully elaborated at this great educational establishment. Our aim is merely to show the importance and the utility of such an institution, and at the same time, by collating the more important facts that are taught there, give an impetus to further enquiries on the part of those who are precluded from the opportunity of acquiring the knowledge to be there obtained. We have received most gratifying testimonies from those of our countrymen employed abroad of the utility to them of the *Mining Journal*: to the resident in England it is a useful record, but to those across the seas, by its weekly information of passing events, it enables them to progress with the age, and at the same time it affords an opportunity of chronicling any important facts which may come under their practical experience, and tend to be useful to the interests of mining in general. With these brief remarks we conclude. The lectures will again be resumed, and we trust that they will not be found deficient in interest. As far as in our power lays, we shall endeavour to elicit such new facts as we believe will be regarded to be of general utility. No one has deplored more than we have the failures that unfortunately have in isolated instances prevented the development of mining education, and at the same time we can proudly say none have hailed the success of the spread of instruction among miners more than we have, and we do arrogate to ourselves the satisfaction that in this great movement we have been throughout useful and active pioneers.

The WEST HARTLEPOOL DOCK AND RAILWAY COMPANY is about to have forced upon it an adventitious notoriety through the allegations set forth in a pamphlet written by Mr. BENJAMIN COLEMAN, of Threadneedle-street, impugning the conduct of Mr. RALPH WARD JACKSON, the Chairman of the company. The pamphlet is addressed to the Preference share, Stock, and Bond holders of the undertaking in question, and it certainly bears upon the face of it a proof leading to the conclusion that, in justice to themselves and the public, the stockholders should institute a rigid investigation into the management of their affairs. There is, in the second page of this document, an extract of a letter written by Mr. COLEMAN to Mr. JACKSON on the 16th of December last, referring to an opinion previously expressed by the writer, "deeply affecting the honour of the Board of directors as a body, and your's (that is, Mr. JACKSON's) as their Chairman and chief administrator in particular;" then follow reasons for so doing, based upon discrepancies in, or rather falsifications of, accounts, but the latter inference, knowing something of Mr. JACKSON as a public man, we deprecate. The allusion to the board of directors is to our mind unnecessary, if not peevishly captious, as it is not to be supposed that because a body of men are united by family ties and old friendships they are open to evil inferences; or, on the other hand, that because a gentleman on the board is incapable to caper like an opera dancer, or to ride up to a pack of fox hounds, he is incompetent to think, deliberate, and rightly decide. Again, in reply to Mr. JACKSON's letter of Dec. 20 last, Mr. COLEMAN asserts his belief, founded on reasons previously subscribed, "that there is culpable negligence, if not positive dishonesty, in the conduct of the West Hartlepool affairs." This is quite enough to startle us from any further comment on this strange affair at the present moment; and while we avow ourselves unwilling to believe so dark an accusation merited, and having only now done our simple duty in alluding to this pamphlet as we have done, we leave the West Hartlepool affairs to the

scrutiny of the shareholders, and await the verdict which they will be compelled to give on the case so ably and boldly submitted to them.

[FROM A CORRESPONDENT.]

As some excitement seems to prevail in consequence of the steps taken at the last meeting of the adventurers in the Old Tolgus United Mines, for raising additional capital by the issue of new shares *pro rata* to the existing shareholders at a nominal price, a few remarks on the subject may not be out of place. The shares (1200ths) are now worth in the market about 18*l.*, which would make every 600th worth 36*l.* Now, supposing the holder of a 600th part to be unable or unwilling to pay the additional 5*l.*, it is contended that his right to take such share would be readily saleable at the price of the 1200th part, deducting the 5*l.* payable upon the allotment of the new share; thus, assuming the 1200th part to be worth 18*l.*, the right to the allotment of one such share would, of course, sell for 13*l.*, as the seller would simply have to give the secretary written authority to transfer one 1200th part to the purchaser upon receipt, for the purposes of the company, of the 5*l.* payable under the resolution within the specified period. It is much to be regretted that whenever the slightest opportunity for unjustly influencing the market, either by depreciating or running up the price of shares, there should be so many ready to prey upon the unwary shareholders in one case, by inducing them to sell, and upon the public in the other, by inducing them to buy at exorbitant prices. It is tricky of this kind, far more than the bringing of worthless mines upon the market, that causes fear and distrust in the minds of capitalists.

A considerable number of shares of the North Rhine Copper Mining Company of South Australia have been officially "bought in" at the Stock Exchange during the week, in consequence of brokers being unable to deliver the stock sold. This showed great scarcity of stock on the one hand, and, on the other, that the purchases have been for investment, and not of a speculative character. The Stock Exchange has always laid it down as a rule that stock sold shall be delivered within a prescribed period, so as to render all transactions *bona fide*; and departure from these regulations would only tend to encourage speculative business; and if brokers will sell what they have not in their power to make over to purchasers, they must abide by the loss which ensues. It is a wise rule on the part of the Committee, and the more rigidly it is enforced the better will it ever be for the general character of business in stocks and shares generally, but especially in mining shares, which are often subject to rapid and great advance in price on the cutting of a rich lode, or the receipt of other favourable intelligence. How often does it occur that mining shares jump up in a day to three or four times the price they commanded the day before?

#### LECTURES ON COAL, AT THE COAL EXCHANGE.

The first of a series of lectures, On the History of Coal and Coal Mining, was delivered by Prof. J. MORRIS, F.G.S., on Jan. 13, in the rooms of the Coal Factors' Society. These lectures are delivered under the auspices of the Committee of the Coal Exchange Museum. The first, On the Geological Position of Coal, comprised a succinct description of the various rocks composing the earth's crust, with a view of showing the relative position of the strata containing coal and other bituminous substances.

Of the various mineral substances constituting, or embedded in, the crust of the earth, few of them are of more importance, or, perhaps, of more interest, than coal, whether we regard its nature, composition, probable origin, distribution, extent, or its important connection with our national resources. Coal may not only be called the civiliser, but also the contributor to the comforts, luxuries, and enjoyments of mankind.

From the early periods of history, Fire and Fuel have been well known social elements, either in connection with religion, domestic purposes, or for use in the arts. Among the nations of the East fire was held sacred; it was an important auxiliary in the Hebrew sacrifices, and regarded as a divinity by the Chaldeans, who had a city called Ur, signifying fire. The worshippers of Persia have been long noticed, and even celebrated in poetry. The Persians possessed buildings in which the rites connected with the sacred element were performed, or assisted at, by the ghebers, or priests. Nor was fire unhonoured in ancient Rome, as the office of the vestal virgins clearly prove. By other nations or tribes fire was, also, considered an essential element in some of their ceremonies. Fuel is everywhere an important part in the practical purposes of life, and as a source of warmth in the temperate and colder regions of the globe, we cannot but regard the vast storehouse of coal contained in the strata of those regions as one among the many providential arrangements for the benefit of mankind.

The lecturer then adverted to the superficial, or surface contours of England, as being due to past physical changes, the explanation of which belonged to geological science, and specially dwelt upon the interior structure or mineral contents of the different districts, as bearing upon, and influencing the occupation of the inhabitants in each. Alluding to a traverse made (in each case) from south to north, he pointed out that the traveller in the eastern counties would pass over an undulating country, comprising a large agricultural district; in the central counties he would find an active population engaged and dependent upon manufactures, and that the busy hum of human industry was around our coal and iron districts; whilst in the most western traverse, through Cornwall, Wales, Cumberland, &c., the scenery would become grander and more rugged, and the people to some extent engaged in metal mining—as for tin, lead, copper, &c.

The various mineral substances in common use for building, ornamental, or useful purposes, were then dwelt upon, such as granite, paving-stone, marble, freestone, coal, slate, chalk, &c., as well as their characters and origin; and it was further shown that the rocks and materials forming the earth's crust—

1. Consist of different substances;
2. That the materials were not formed at the same time;
3. Nor formed by the same means;
4. And did not generally occupy their original horizontal position;
5. That the strata were arranged in a regular order of succession.

The practical value of the latter proposition was clearly indicated, for a person well acquainted with the order of succession of the rocks in this country, their character, and organic contents, would hardly fail to recognise their relative position in other districts, and which knowledge might further prevent fruitless and expensive searching for mineral substances in situations where they do not exist, and of which many instances are recorded of unproductive results in boring for coal.

Rocks have been chiefly formed by two agencies—the igneous and aqueous; the latter generally considered a destructive, the former a conservative agency. By an attentive study of the ordinary operations of nature, and their effects, a clear insight may be obtained of the formation of the different strata. The disintegration or wearing away of rocks is constantly going on by the meteoric action of wind, rain, frost, and ice, and the abraded and detached particles are brought down to lower levels, or within the carrying influence of streams and rivers, which not only assist in further scooping out their channels, but in propelling onwards the gravel, sand, or mud, and depositing them, according to their gravity, on the river sides, into lakes, or at the river mouths, forming bars or banks in the sea or estuary. The deltas of many rivers, or formation of land at their mouths, are striking examples of the wearing and abrading powers which have been carried on in the upland districts, and their removal and distribution of the material to lower levels, as in the alluvial lands of the Rhine, Po, Ganges, Nile, or Mississippi; the delta of the latter river being estimated at 14,000 square miles, the upper parts supporting a luxuriant vegetation, the lower or more swampy portion covered with grass and reeds—the whole delta, and its accumulating vegetable matter, not inaptly representing the origin of a coal seam.

The formation of gravel beds and submarine accumulations may be illustrated by the action of sea waves upon the coast line, the destruction of the cliff, and the subsequent carrying out seaward of the finer detrital matter, and the embedding therein of the remains of sea shells, crustacea, &c. Thus the formation of many rocks, limestones, sandstones, and clays may be explained by the combined action of chemical and mechanical agencies, acting through long periods of time, mixed up with the exuviae of organised beings living at the period when the rocks were in progress of formation; while many rocks bear evidence of fresh water or marine origin, old land surfaces, or proximity to land, are indicated by the beds of coal and strata largely charged with plants. All rocks thus formed are termed stratified. A large portion of England is composed of the stratified rocks, which have been gradually but successively deposited at different periods; these rocks have, therefore, a regular sequence in time, and a relative position to each other, which order is never inverted. They are further divided into three great systems or series—the oldest, or primary; middle, or secondary; and younger-formed, or tertiary; each again subdivided into minor groups,

but each having peculiar characters, both mineral and organic, by which they are readily distinguishable from the other; of these characters, the contained fossil remains are the most important. Thus, peculiar forms of Crustacea, the trilobites, and certain shells chiefly of extinct forms, as among the Lammelli branches, the Brachiopods and Cephalopods of the nantholoid group, as orthoceras, &c., and peculiar forms of sauroid fish, and a great proportional development of acrogenous plants, as ferns, &c., mark the palaeozoic period.

Reptiles of singular forms, many fish (ganoids), shells of different genera, especially ammonites, belemnites, &c., and trigonia, nerinea, &c., ferns and cycadeous plants and a few mammals, indicate the secondary period; while the tertiary period is characterised by shells of existing genera and many living species, a large number of mammalia and the vegetation related to the present surface. Of these systems the oldest constitutes the western district, the middle series is found in the central counties, and the newer series forms the land of the eastern counties.

Throughout these series more or less bituminous matter and coal are found. In descending order the tertiary rocks in this country yield peat and turf in the upper strata; the lignites of Antrim and the Bovey coal of Devon in the middle or lower strata; and, on the Continent, the brown coal of the Rhine, Germany, Bohemia, &c., and the lignites of the Paris basin. In the secondary rocks of England occur the Kimmeridge coal, the moorland coal of Yorkshire, the Brora coal of Scotland, and the jet-rock of Whitby. To this period may be referred the Wealden coal of Hanover, the Burdwan and other coals of India, and the coal of Richmond, Virginia.

It is, however, from the primary or first-formed series of rocks that we obtain in Great Britain, Europe, and the United States, the largest supply of the useful mineral, coal. The carboniferous beds or coal measures occur, geologically speaking, between the old red sandstone below and the new red sandstone or salt-bearing beds above. It was at this period of the earth's history, in ages long gone by, when the physical configuration of the surface differed from the present, that the lands and islands in the northern hemisphere were successively clothed with a rank and abundant vegetation, the source and supply of the fossil fuel, locked up in the deep recesses of the earth by the deposits of subsequent periods—a vast storehouse of coal—to be rendered available in long after ages to the industry of man, and the promotion of his social progress.

#### WELSH COAL—GOVERNMENT CONTRACTS.

In our last Journal we announced the fact that although the Wiltshire iron ore would not work with coke made from Radstock coals, the neighbouring works at Westbury, by using Ebbw Vale coal and coke in equal proportions, make good grey iron, and that the Seend Iron Company intend using Cwmillery coal and coke mixed with Raubon. This announcement is, doubtless, highly satisfactory to the Welsh coal owners generally, as it fully proves the excellent character of their coal for metallurgical as well as commercial purposes. According to the latest published return of coals tried at Woolwich and Portsmouth dockyards, it appears that the quantity of water evaporated by Russell's New Black Vein coal was very large compared even with other Welsh coals, and since the value of these coals for metallurgical purposes has now been confirmed, they cannot fail to take a prominent position in the market.

In the official return alluded to we find that as respects Welsh coal tried at Woolwich, Russell's New Black Vein steam coal (Tyr Nicholas Colliery) gave the following results:—Water evaporated for each 1 lb. of coal consumed, calculated from 100 deg. constant temperature of the feed water, 9.56 lbs.; water evaporated per hour, calculated from the same temperature, 50.67 cubic ft.; percentage of clinker, 0.79; percentage of ash, 5.75. Fothergill's Aberdare stands next on the list, but is slightly below Russell's in the quantity of water evaporated, does not evaporate it quite so quickly, and makes twice as much clinker, it has, however, slightly less ash, and makes but little smoke, so that it cannot be considered that the return at all injures its reputation. It will thus be seen that Russell's coal possesses evaporative power fully equal to any other coal in the market; having a high percentage of carbon, white ash, and being free from sulphur and from anything injurious to bars or boilers, burning brightly and getting up steam quickly; added to these the New Black Vein steam coal has another great advantage—the small will get up steam as well as the large. Now, whatever may be said by disappointed individuals as to the incompetency and partiality of those connected with the Admiralty, no objection can be made to a coal possessing such qualities as those stated being chosen, and therefore, the announcement that a contract has been entered into for a supply of Russell's New Black Vein coal for the use of Her Majesty's steamers, and that it is giving perfect satisfaction, will be received with pleasure. With regard to the general opinion entertained of the coal, it may be stated that although the works have been but recently opened the coals have been highly eulogised by many large consumers, and the small is said to make a very excellent coke for locomotive purposes. With such results and such successes as these it must be admitted that the North Country owners will have some difficulty in proving their title to their claims as producers of steam coal superior to that of South Wales.

#### MINERAL CAPABILITIES OF OUDE.

Oude is now an object of considerable interest, because public attention has been concentrated on it for some time, in connection with its misgovernment, and its share in the horrors of the revolt; and now attention is the more readily given to its pacification, and the development of its resources, as a principal means for insuring peace. Among those who have turned their swords into ploughshares is Mr. L. E. Rees, so well known to the public as the historian of that eventful siege of Lucknow, in which he was engaged. As a contribution towards the pacification of Oude, in which he feels a natural interest, Mr. Rees is now engaged in bringing before the public his observations on the resources of the country, for which he has had good opportunities in an eight years' residence. We may observe that Mr. Rees is not engaged in the advocacy of any company or scheme, and that his attention has been chiefly devoted to the agricultural productions of the country. Those interest us little; but we are glad to avail ourselves of some information as to its mineral resources.

We may premise that, although the country was nominally acquired by us a few years ago, yet, by the intervention of the revolt, it is only now at our actual disposal; and it may be taken as an example of the vast resources of India, that this one country, now about to be opened to our enterprise, is as large as Scotland or Ireland, but very different in its geological characteristics. In these latter countries we have examples of a vast variety of formations split up into small parts and mixed up together; thereby we have an abundance of mineral products. It is far otherwise in Oude, where the surface, which may be considered as a general plain, is covered by uniform deposits, chiefly diluvial or alluvial. Thus we have presented to us a vast geological operation of nature, to which the basins and terraces now existing in our own islands present no parallel. We have nothing on our surface comparable in extent. We must go back to a geological period, and then our ordinary maps do not help us. We contemplate the South Wales coal basin as a grand operation, but that gives us no idea. We must take the area of the chalk formations at a period when the tertiary deposits existed not, in order to form some idea of the extent of such a geological region as Oude, and then, having compassed this, we nevertheless fail; for Oude is but a portion of the great valley of the Ganges—one vast plain. Such speculations are, however, of interest to the geological student, for he finds in these plains of Northern India, in the Pampas of South America, and in the existing oceans, the examples of those geurgic operations which have been the creative mechanism of the sandstone formations of our island, for instance, or others of the great phenomena which constitute the epochs of geological history.

In Oude there are no rocks, in the common sense, and thus the home geologist is deprived of the chief and prominent topics of his studies. Much of the surface, as we have said, consists of light soil, and the hard matter is composed of ferro-oxides, carbonate of lime, silica, and sulphate of soda. This is called *kunkur*, and is often found to constitute the banks of streams. The northern bound of Oude is, however, formed by the outlying ranges of the Himalayas, which here belong to the territories of Nepal, and the productions of which would be available to the inhabitants of Oude were there good means of communication, or were Nepal itself under English Government, instead of that of Jung Bahadoor, who monopolises its commerce for his own purposes.

The surface of Oude, though for geological purposes entitled a plain, presents many varieties. Its total rise from south to north does not, perhaps, much exceed 200 feet, till it reaches the *terai*, or jungle, at the foot of the Himalayas; but it is cut up by numerous rivers and *mudders*, or



streams; and in the south it is bounded by the Ganges, to the system of which its rivers belong. Some of the main rivers are navigable throughout the year; but the *mussoories* in summer time can be crossed on foot. All these rivers and undecies overflow, and some of them change their course; though where they flow between hard kunkur banks, they seldom desert their course. They are, however, productive of a great variety of superficial changes, and between the streams the soil is heaped up in ridges; while in other places the streams in summer time are sunk deep below the surface, and beyond the reach of the agriculturist. Thus, instead of the flat lands of Holland or Flanders, we get a more gently rolling land, like some of ours at home, or the prairies of the West, but very different in its clothing or aspect.

The soils of Oude are chiefly argillaceous, varying in colour from light brown to black, which latter black soil contains carbonates, silicates, sulphates, phosphates of alumina, and potash.

There is more variety of mineral productions than might be supposed, and yet a paucity as compared with those we enjoy. The kunkur is used for various building purposes, but largely for the manufacture of lime. A shell lime is obtained from recent beds of shells, which are gathered, and burnt with cow dung.

The chief mineral production is, however, saltpetre, which is found in great quantities impregnating the alluvial soil of the country. The saltpetre formations are patches wherein saltpetre is found more or less prevalent. Some of these are, nevertheless, employed for cultivation; but there are others which are utterly barren, and employed for the saltpetre manufacture. By lixiviation these patches are made to yield saltpetre and common salt; and from the most barren soils carbonate of soda is obtained for the manufacture of glass and soap. The whole of these articles are largely used in the country, and considerable exports of them take place to the neighbouring provinces, but the chief trade is in saltpetre.

The bankers, Shah Beharee Lall and Rughber Dial, generally succeeded in obtaining from the late king's Government the contract of the saltpetre manufactured in Oude, producing an annual supply of from 600 to 1000 tons; but as smuggling in a country where no system prevailed was a matter of no difficulty, so it is computed at least three times that amount, as from 2000 to 3000 tons were exported as contraband to the English provinces; thus the total produce is very likely from 2500 to 4000 tons, but as under the English Government the monopoly will be at an end, the production will be largely increased. It will, however, be much more increased by the application of English capital and enterprise, for Mr. Rees has informed us that the processes of manufacture are most rude, consisting, as he says, of mere washing with small tubs and sieves. Mr. Rees estimates that the production will rise considerably under a peaceful Government, provided that means of transit are favoured, and the trammels imposed on the free export of the article be removed. Thus, for instance, the permission to export saltpetre to America will open a considerable trade. This saltpetre is refined at Cawnpore, Futtehpoor, Allahabad, and Futtehpoor, the establishments of which forward the most highly-purified saltpetre to the Calcutta market. At present it is sent to the refineries mixed with impurities, but English firms will now establish in the Oude cities saltpetre refineries, salt and soda works, so that the produce of Oude will enter the market on better terms.

We may here mention that the manufacture of nitrates is not properly attended to in England, and that in case of a general war we might find ourselves in serious difficulty for the supply of a chief element of ammunition, and an important substance in the arts. The production of English sulphur has become a national resource of late years, but our operations in nitrates are entitled in the conversion of materials imported from abroad.

The importation of nitrates from the East Indies and from the west coast of South America, in various forms and for many purposes, is enormous. The salt trade, as we have observed, is another resource of Oude, but it is likely to be trammelled for a time, as Mr. Rees calls attention to the fact that in Bengal it is a Government monopoly. This cannot, however, long be the case, for the Cheshire Chamber of Commerce is loudly agitating for the abolition of the salt tax, and for throwing open the trade.

There are, it will be seen, no mines of metallic substances, and it is, therefore, unexpected to find gold among the products of Oude. There can be little doubt it is to be found more or less disseminated all over the country, and all over India; indeed, Mr. Rees states that gold dust has been found in many of the rivers. The Sona Nuddee, or gold stream, &c., however, that best known and worked, and Mr. Rees states that it is the general opinion it might afford a profitable source of speculation and revenue.

The stream rises in the almost inaccessible steep of Nepal, and bears away by the violence of its current in the upper valleys the gold which is supposed to be plentifully distributed in the veins and concretions of the primary rocks over which it runs, such being the usual article of belief in gold-washing countries, where the mother of gold is eagerly looked after.

The alluvial soil in which the gold has been found has been for ages known to the natives of the Kyreegurh district, but there, as in most places, the gold-washers are poor. They are inhabitants of the neighbourhood, hired by a speculative native banker of Lucknow, at 3d. or 4d. per day, according to the quantity returned by them. The process is the common one of panning. As is usual in a gold district, the country is unhealthy during and immediately after the rains, but is supposed not to be so in the dry weather. The temptation to apply the English stamping processes has been great, and before the revolt it was taken up by the late Mr. W. W. Reed, an energetic speculator; he was, however, one of the victims of the siege. Mr. Rees is one of those who consider it worth serious consideration.

We may observe that it is more than likely gold working in India will become of much more importance than it has ever been. Hitherto it has never been prosecuted with intelligence and enterprise, and although there are numerous known gold streams in India, hundreds of which have been worked, and some still yield a small produce, the quantity of gold raised in India is supposed to be very small. There are, however, in India many districts of the character of the Uralian and Siberian gold formations, and some approaching those of California and Australia; and when those regions near the hills come to be explored, to which the Society for promoting English Settlement is drawing attention, it will be by no means unlikely that some great discovery of gold will be announced to the eastern world.

Mr. Rees relies for the development of Oude on the construction of roads, the guarantee of the Oude railways, and the steam navigation of the Gogra and the Goomtee. It has been well observed in the *Leader* that in a country the size of Ireland there is one small river steamer (and that, we believe, has been withdrawn by the Government), and not one mile of railway. The *Leader* might have said there are no roads.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

JAN. 20.—The Coal Trade here continues in the same position as last reported. A meeting of pitmen was held at Leadgate on Saturday last. It was a local gathering, composed of men from the neighbouring collieries, and also by delegates from other collieries. The Chairman stated that Mr. Roberts, the lawyer, had been re-engaged to represent the interests of the pitmen, and that he would shortly open an office in Durham, when he doubted not ample justice would be done to their cause. He also stated that they intend to give him a salary of 500*l.* per annum, to meet which one penny per week would be required from each man. Several delegates addressed the meeting on the necessity of establishing and consolidating the Union. We are totally at a loss to divine what those interests are, that are thought by those misguided men to require the services of a standing lawyer to look after them. We think that the coal miners of this district will best consult their own interests by managing their own affairs, and dispensing with limbs of the law altogether. We can certainly conceive that it may be necessary on special occasions, when disputes arise, to employ a lawyer; but to employ a standing one is simply ridiculous and foolish, and calculated to do much harm, by engendering disputes and ill-will between the employers and employed.

A blast-furnace has been got into operation at the works of Hawks and Bell, near Washington. Those works occupy an excellent position, being situated near the junction of the coal railway, which forms the principal outlet for the north-west Durham coal-field with the North-Eastern Railway. Plentiful supplies of coal, coke, &c., are, therefore, of easy access, and iron ore can be had from the Cleveland district. The brand produced by this new furnace is highly spoken of. Extensive chemical works are also in operation here, with several works for iron manufacture, &c., on a smaller scale; one of the most useful of those being carried on by Messrs. Cook. A number of men are now employed at those works, a foundry and other works being in operation. They are principally engaged in supplying the numerous collieries in the district with coal tubs, and manufactured implements of various kinds. The works at this point have ex-

panded and increased very much lately; only a few years have, indeed, elapsed since it was quite a rural scene; but it is rapidly becoming a scene of busy activity.

The Brenkburne Coal and Iron Works, situated on the River Coquet, about 25 miles north of Newcastle, are still in existence, one furnace being in blast. We believe that considerable sums of money have been expended here, and the result so far has not been encouraging. Whether this is owing to mismanagement, or to the unfavourable nature of the field for such operations, we are not prepared to determine. However, a complete change in the management took place a short time ago. The staff is now composed mostly of Shropshire men, and many miners from the same county are also employed. We confess that this circumstance tries our risible faculties very much indeed. It is an old stale joke that "you must not carry coals to Newcastle;" what, then, are we to think of carrying colliers and miners from Shropshire to the same place? We have always been led to believe that mining in that county (Shropshire) was about on a par with that of the antediluvians; and we would as soon expect to meet with a colony of the ancient Romans who built the great wall, as with Shropshire miners on the banks of the Coquet. We expect to be able to give some particulars respecting these works next week.

On Thursday an inquest was held at the house of Mr. Palmer, North-road, Durham, on the body of Hugh Trainer, coal hewer, who had died at the County Hospital from injuries received in Sherburn Old Colliery, on Dec. 16. Deceased was 44 years of age, and was engaged in heaving coal on the day in question, when a quantity of coal that he was preparing to blast, gave way, and fell upon his leg, which it crushed in a frightful manner, producing compound fracture. He was conveyed to the Durham County Hospital, and when he arrived he was suffering severely from loss of blood. Death ultimately ensued. Mr. Atkinson, the Government Inspector, was present at the inquest. No blame was attached to any person, and the jury returned a verdict of "Accidental Death."

It is announced that a new private bank is to be opened in Newcastle shortly, but the names of the parties have not as yet transpired.

#### THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

JAN. 20.—The improvement spoken of during the last few weeks in the Iron Trade is confirmed by all the indications which can be relied upon as proving that a reaction has set in. Nearly all parties now look forward with confidence to the future. It is hoped that the general disapproval of most of the great powers of Europe of any rupture in Northern Italy—if that disapproval is not shared by the majority of the French people—will serve to prevent the hostilities which at one time appeared imminent. Almost all kinds of raw material used in the manufacture of iron are higher in price. The Coal Trade is improving, and it is anticipated that, should the present improvement continue, several blast-furnaces which have been blown out since the crisis of 1857 will be put in again.

A letter from Mr. W. H. Miller, who signs himself Honorary Secretary of the South Staffordshire Miners' Union, calls upon the masters to advance the men's wages, and invites them to reply to that appeal. Considering that Miller is only a herbal doctor, who has no connection with the colliers, and that it has never been stated how many members belong to the Union, it is hardly likely that such an appeal will meet with any response, especially as the letter does not allege that it was written at the request of any meeting.

Mr. Leigh, Stipendiary Magistrate of Wolverhampton, yesterday took occasion to express his extreme dissatisfaction with the manner in which the Truck Act is being enforced by common informers. He suggested that a Government officer should be appointed to enforce its provisions. There can be no question, as has been repeatedly stated in my reports, that the prosecutions are almost entirely got up by informers, who make a gain of the system, dividing the profits with the legal advocates who devote themselves to this particular line of practice. It certainly appears strange, with a penal Act which is most severe against those who pay in goods or at public-houses, that the colliers and other workmen are so indifferent as never to enforce the Act, except through the agency of such persons as inform in these cases. It is very doubtful whether Government could assist men so utterly indifferent to the means provided for protecting them from a wrong of which grievous complaint is often made.

#### REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

JAN. 20.—Iron of all descriptions has been in more active demand this week, and considerable quantities have been disposed of. Pigs meet a ready sale, and prices are firm. An advance is not looked for at present, but during the last few days a more confident feeling has been experienced in consequence of the pacific turn affairs have taken on the Continent. The apprehension which existed last week of disturbed peace tended to distress the markets, but the subsequent intelligence having removed the principal sources of fear, buyers are coming forward more freely, and fresh orders are put in hand. The trade meetings at Birmingham and Dudley have had a good effect here, and the ironmasters look forward, in common with those of Staffordshire, to an advance in the price of iron before the expiration of the quarter. It is known that stocks in the hands of home consumers are very low, and by this time they must be nearly exhausted. During the present week some of them have been compelled to make fresh purchases, and with the demand from America and the Continent, the works begin to be full of business. Railway iron is especially in request, and some large importations have been made this week. Ample trade is done to give full employment to the hands at most of the district works, but the masters agree in the opinion that an advance in the rate of wages cannot yet be made. We hear of no disagreements with the men on this subject, but complaints are made of the unreasonably long pays which have been introduced. Six, seven, and even nine to ten weeks elapse between settlements, and the men are, of course, driven to the "shop" to a greater extent than ever. This is necessarily felt to be a great hardship, and in some cases the tradesmen have appealed to the managers to go back to the former system. At Tredegar this was promised, as we have already announced, but in other works no hope of an alteration is held out. We believe this question to be one well deserving the attention of the proper authorities, since it is obviously most desirable to give the men as few causes for dissatisfaction as possible. Certain it is that relief is urgently called for, and some of the local papers constantly contain stringent censures on a system which seems adopted for the express purpose of driving men to the "shop."

With regard to the Coal Trade, we can also report an improvement in the demand, comparative activity being now felt in the ports. A good many vessels are now loading for French and Mediterranean ports, and steam coal is being bought freely. The following are the freights current at the time we write:—Aden, 50*s.*; Bombay, 50*s.*; Bahia, 28*s.*; Calcutta, 50*s.*; Cape of Good Hope, 38*s.*; Hong Kong, 52*s.* 6d.; Mauritius, 40*s.*; Monte Video, 31*s.*; Rio Janeiro, 34*s.* to 35*s.*; Shanghai, 55*s.*; Singapore or Penang, 38*s.*; Malta, 16*s.* 6d. to 17*s.*; Marseilles, 17*s.*; Naples, 15*s.* 6d.; Syria or Athens, 17*s.*; Alexandria, 15*s.* 6d.; Constantinople, 22*s.* 6d.; Gibraltar, 15*s.* 6d.; Lisbon, 10*s.*; Hamburg, 10*s.* 6d.; Plymouth or Liverpool, 6*s.* 3d.; London, 8*s.* to 8*s.* 3d.; Portsmouth or Southampton, 7*s.* to 7*s.* 6d.; French ports, from 11 to 17 francs. These rates show an advance generally of from 4*s.* 6d. to 10*s.* 6d. as compared with those of last week. This is a satisfactory sign of the improvement to which we have referred. Merthyr and Duffryn coal (Nixon's) now fetch 21*s.* per ton in London. The freights for iron range from 17*s.* 6d. (New York) up to 27*s.* (Trieste).

It will thus be seen that a decided change for the better has set in, and a successful season lies before our iron and coalmasters. At this moment the position of the principal concerns is satisfactory, and at many of the works extensions and other improvements are actively going on. Great attention is being paid to this subject at Rhymney, and the manager has lately carried out several designs for making the various departments more efficient than they have been heretofore. The Nant-y-Glo works, under Mr. Crawshaw Bailey, are going on very prosperously, and a large and gradually-increasing trade is being done. It has been just decided to make a station at Nant-y-Glo, the Western Valley line from Newport having been extended to that place recently. This improvement in railway transit will prove a great convenience to the works, and will, doubtless, save considerable expense and trouble. At Tredegar, activity likewise prevails, and large supplies are constantly being turned out. The same observations apply to Ebbw Vale and Blaenavon; and, indeed, generally speaking there is an absence of that slackness which was felt during part of last year.

Mr. Rogers, in his useful treatise on *Iron Metallurgy*, has dwelt much

on the great waste inseparable from the present modes of mining coal. We believe this subject is now receiving the attention of several of our principal coalowners, with a view to the adoption of some system by which economy may be judiciously observed. It is well known that good serviceable veins of coal are neglected, or left half worked, on account of the richness of the district, and, in some cases, through the cupidity of the owners. There is no fear of our 12,000 square miles of coal being used up, as an eminent geologist has calculated that the South Wales formation alone, of the extent just mentioned, is capable of supplying England with fuel for 2000 years, even if the mines in other parts of the country should be worked out. Still, we may well be surprised that while economy has been carefully studied in the consumption of coal, and for this purpose many improvements have been introduced, the immense waste caused by the modes of mining it goes on from day to day, and no alteration seems to be even attempted. We have before quoted part of Mr. Rogers's remarks on this topic, and without attempting to re-open a subject which he has so ably handled, we may express a hope that some abatement may be made in the evil referred to, and that coalowners will see the advantage which would accrue to themselves if prudence and care were exercised in lieu of extravagance and recklessness.

The Wenvoe Iron Company have recently discovered at Coodycimdder a vein of highly metalliferous ironstone. Those who have examined it pronounce a very favourable opinion of its quality. Some have already been sent away by the South Wales line.

We have reason to believe that we shall shortly be called upon to announce a change in the management of the Abersychan Works, near Pontypool (the "British"), but at present we are scarcely at liberty to enter into particulars.

An effort is being made by the colliery proprietors of Swansea and its neighbourhood to construct a railway from the docks to Penclawdd, and eventually to Llanrhyddan. Several collieries would be benefited were the design carried out, but at present it is only in its infancy.

#### REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JAN. 20.—The conviction which we have often expressed with regard to the permanent improvement in the position and prospects of the iron trade is being fully verified, as, judging from the reports which we have received from several districts, the trade is in a most healthy and satisfactory condition. There is less apprehension felt with regard to the warlike tendency of continental politics, and this has tended to infuse renewed confidence, which was being, in a great measure, shaken by the unfortunate speech of the Emperor of the French. We have private letters from France describing the efforts of the French ironmasters to increase the rates charged on the importation of British iron; but up to the latest dates no alteration had been decided upon. The makers of the best brands of iron are well supplied with orders, but there is a difficulty experienced in disposing of inferior brands. The rates approved at quarter-day have been well maintained. Some large orders for railway iron have been taken by two houses in Yorkshire. In Lancashire the firms generally are well employed, and the hands have settled down quietly to work.

The aspect of the Coal Trade, on the whole, is very satisfactory. The demand for the metropolitan market has increased materially; and it is only within the past fortnight that the supply could be adequately met. In Derbyshire everything is exceedingly quiet, and the trade improving; but in Lancashire we have a very different thing to notice. During the past week the colliers of Wigan have been, and are, out on strike; and on Monday morning the police were protecting the "nobsticks" on their way to work, when a sergeant of police interfered, and he was severely injured by the mob, who pelted him with stones, and the riot became so alarming that the authorities sent for a detachment of soldiers to quell the rioters, and it had the desired effect.

There have been several meetings of lead mining companies in Derbyshire since our last. The Haslam Pipe meeting was held on Tuesday, at the Red Lion Hotel, when there was a moderately good attendance of shareholders. The expenses were about 400*l.*, and the greater part had been owing to the eccentric nature of the mineral; about 200*l.* had been expended in "driving." A long discussion took place respecting the salary of the agent, who had 40*l.* per year to visit the mine from Chesterfield twice a week. Some dissatisfaction was expressed as to the payment of such a sum for the services of an agent who resided so far from the mine. Proceedings were also ordered to be taken against all shareholders in arrear of call.

There has been a meeting of the New Midland Company at Ashover this week, when a divided opinion prevailed as to the company being wound-up. There are two sections of parties; one desires to wind-up, and the other wishes to purchase the plant. We have not heard whether the new and enormous engine at North Derbyshire has been put in motion; but the operation cannot be much longer delayed, unless some accident should occur.

The Mill Dam Company are making great progress with the new shaft and the preparations necessary for the engine.

The most notable feature connected with the mining share market has been the great depreciation in the value of Eyam shares, which have gone down gradually from 60*l.* to 24*l.* and 25*l.*, at which prices numerous sales have taken place. The real cause of the fall is the condition of the mine, which is said to be much poorer than for a considerable period.

#### LEGITIMATE MINING AS AN INVESTMENT.

BY JOHN ROBERT PIKE.

Conspicuous in the northern hemisphere of the heavens stand the two constellations, *Taurus* and *Ursa Major*—the former having some resemblance to the outline of the noble animal whose name it bears, the latter rejoicing in the apparent singularity of a headless trunk—an accident which astronomers may some day be able to remedy, by finding that important member in close proximity, or even in actual contact, with its paws. The "Bull" and the "Great Bear" are, however, too elevated for the exercise of our critical powers, and we, therefore, leave them to the votaries of astral science. There are also "bears" terrestrial, and "bulls" subterranean which by zoologists are classed with the great division of quadrupeds, and with the physical peculiarities of which the merest tyro in learning is ordinarily familiar. But the "bulls" and "bears" with which we have to deal are neither carnivorous nor ruminant, but belong, like ourselves, to the highest order of mammalia, and are designated in the nomenclature of science as *homo sapiens*. To many of our readers the terms "bull" and "bear," when used in connection with the stock and share markets, may appear as mystic words, denoting some occult process in the constitution and working of the markets beyond the ken of mere ordinary mortals. To some extent they would be right in arriving at such a conclusion, and as these two classes of individuals exercise a most important influence for good or evil as affecting the market prices of shares and securities in general, we have thought it right to demonstrate as briefly as possible their different modes of action, their particular aims, and the way such proceedings affect the interests of shareholders as a class.

Passing to general definition, a "bull" is an operator for a rise, and a "bear" an operator for a fall in prices—the stock to be delivered at some fixed prospective date. Many individuals there are who so buy and sell on what they believe to be information consisting with their various personal opinions, they being in such cases solely guided by circumstances. But the class to which we would desire to direct the attention of our readers are constitutional and indefatigable "bulls" and "bears"—men whose life lie in one course of proceeding only, and who firmly believe that they would be uniformly unsuccessful in the attempt to tread any other path.

The "bull" is usually a sanguine man, recognisable by his joyous humour when business is brisk and values rising, but dejected and low when an adverse current sets in, and when prices are falling and ill-sustained; but still no amount of pecuniary loss can shake his confidence in an early favourable reaction for the better. His dealings as a rule are not so inimical to the general weal as might be supposed, although at periods, when the public demand for stock is steadily increasing, his course of dealing acts as an unhealthy stimulant to the necessary and consequent advance in prices—the public who at such a time come as buyers being manifestly damaged by his particular action.

The "bear," on the contrary, is, generally speaking, a gloomy man, who might be not incorrectly defined as a perambulating calculating machine. He is a good judge of character, and prides himself—like Samuel Slick, of Slickville, Esq.—on his knowledge of "human natur." The public is to him an aggregation of money-yielding automatons. He knows, or thinks



he is acquainted with, the infirmities of our national character, and works energetically for isolated aggrandisement. Should he find any market particularly sensitive, it is immediately singled out for destruction. On the face of regularly continued sales of stock, the shareholders who are not personally acquainted with the value of their property are seized with alarm, and are glad to realise any amount of money, however small, in exchange for what they consider to be worthless shares, the "bear" thus reaping an abundant harvest out of the timidity and fear of a large section of the investing public. A terrorist by nature, his insidious dealings often destroy the public reputation of bona fide undertakings, and sap the foundation of credit on which the honour and well-being of business firms are built. Sometimes the "bulls" and "bears" meet in open conflict, both struggling for the mastery; but if we suppose them to be equally matched in speculative daring and length of purse, such is the tendency of men to look on the dark instead of the bright side of things when their property is possibly at stake, that without the most ordinary examination they will part with their shares at prices ridiculously out of proportion to their normal value, so proving the accuracy of the "bear's" calculations. That a vast amount of money is annually lost in this manner is, unfortunately, indisputable; but if shareholders, either in the case of a *possessio*, would, on the one hand, carefully ascertain whether when the market value of their property is falling it is being systematically depressed for party purposes, and, on the other, whether prices are being unduly raised; and if such should prove to be the case to refuse to operate, they would be long the "bull" a desolate "victim" on the perils of "Change, and the "bear" caged as a zoological curiosity amongst his plantigrade congeners.

## MINING IN JAMAICA.

The advices by the West India steamer bring our mining intelligence from Jamaica to Dec. 26, and are, as usual, perfectly assuring, and confirmatory of progressive and satisfactory advancement.

**ELLERSLIE AND BARDOWIE MINING COMPANY.**—Salisbury Plain: In every department the work is steadily advancing. Mr. Smith (the purser) sends you a very valuable sample, which has been declared here to contain silver, and has been valued at 80¢ per ton for copper and silver.

**RIO GRANDE MINING COMPANY.**—Portland: Capt. Arthur writes that very heavy rains had interrupted the work, but in all respects the properties continued to improve in appearance, and only wanted sufficient labour to get out any quantity of valuable ore then in sight.

**HOPE SILVER-LEAD AND COPPER COMPANY** had shipped, per screw-steamer *Clatona*, for Liverpool 18 tons of silver-lead and 7 tons of argentiferous copper ores, and the nature of these properties are most decided: it is a great success.

**CLARENDON CONSOLIDATED.**—Josiah Martin, Dec. 24: Stamford Hill Mine: The mine in the engine-shaft is without alteration to notice since I last wrote to you. The men have completed the laying of the timber at the 58 for the reception of the 9-inch pumps; they have also put in the solar in order to commence driving east and west on the lode in that level, the lode being very large and kindly at the place where we shall drive. I intend driving with native miners, at the same time the Englishmen will be putting the work in the upper part of the shaft. The 46 south, on the cross-course, is without alteration to notice; the 46 west of engine-shaft, on the north lode, is still looking very kindly, composed of green carbonate and rich yellow copper ore, and is letting out a fine stream of water. I have broken from this end within the last two or three days some very fine stones of yellow copper ore. The masons are getting on with building the chimney very satisfactorily. All other parts are progressing with vigour, and I hope are long to have the whole set to work, which will enable us to go on at once to accomplish the object in view.

At the WHEEL JAMAICA meeting, on Dec. 22, it was reported that the operations at Charing Cross were being vigorously prosecuted. The correspondence with parties in England, with the view to carry out important objects connected with the company, has resulted in the machinery required for Charing Cross, to be forwarded to the island with as little delay as possible. The course proposed for the raising of additional capital, it was then the case, could be found easy of accomplishment. As the ground is already unwatered down to the 65 ft. level, a shaft had been commenced which can be sunk to that depth without the aid of machinery. The prosecution of this shaft, and the making of a good road between Retreat Estate and the mine, of which rather more than a mile had been completed (out of 3½), constitute the principal workings at the mine. The accounts showed a credit balance of 11767. 17s. 3d., including outstanding calls. The committee regretted that, in consequence of the non-arrival of the steamer, they were precluded from laying before the shareholders any intelligence from England.

From MR. JAMES CROFTS:—In the progress of a question of such moment to the country as that of Peace or War, the incidents of a single week may throw either a light or shade over the matter for good or evil, and it happens that during the week now passing the probabilities have become almost a certainty, that the advent of war, if it be considered as at all certain, is a remote one, and probably, as much as any matter can, turn upon the question of finance. The exhausted treasuries of the lately belligerent powers is producing that drug to hostile action which has become more, or as much, a matter of necessity as prudence; and, therefore, it would appear that for actual war the time is not yet, to whatever extent may be visible that "note of preparation," which is indicated in the strengthening of forces, or the guarding more closely of frontiers. The event of the death of the King of Naples (just announced) if true, judging from its effect on the Funds, which have fallen only ¼ per cent., rather indicates good than evil, as it tends to the cause of peace, and in its immediate and future consequences can scarcely fail to benefit the oppressed populations of the Two Sicilies, apart from any "complications" which may ensue in settling the policy of the succession in reference to their political tendencies, so that what weightier powers may coincide. On the whole, the markets, however, are still good, and with the exception of a rather diminished business from the provinces, there has been great activity in, and avidity shown, to purchase every class of good stocks in mines, both dividend and non-dividend, and in many of them (the former in particular) a considerable advance must be noted—such as in Providence, West Margery, Bedford United, Dolcoath, Great South, Tolgus, South Caradon, and St. Day United; whilst Wheel Mary Ann and Tincroft are lower. Par Consols, Wheel Trelawny, Wheel Buller, Wheel Bassett, South Frances, North Bassett, Minera, and Alfred Consols (all the preceding being first-rate dividend-paying mines) have shown little fluctuation in value.

A reference to the writer's last letter may be necessary to render the following explanations fully understood. A most satisfactory meeting was reported of Old Tolgus United, when the number of shares in the mine was increased, in lieu of a call, to 1200, by the creation of 600 new shares at 1s. each, an apparently sound resolution, and unanimously voted. By intervention of his legal advisers, the said shareholder, who to the last (as it is stated) held back the amount of calls due from him, has now applied for an injunction in Chancery to annul the said issue of new shares, on the ground of its illegality according to the rules of the said book of the mine, which error (if it prove to be one) the management are about to repair by calling a special meeting for the special object of providing funds for carrying out this valuable property to a successful issue. The manner in which this legal proceeding has been conducted by an inundation of notices to shareholders and non-shareholders promiscuously, and in many cases in duplicate, and not met the entire approval of the mining market, nor has any sufficient cause yet been shown, or is apparent, for the necessity of any measure beyond that of a protest to the management, to which they would have been equally bound to listen as to a "Bill in Chancery," and its consequent heavy expense. In the meantime the shares have become quiescent as regards transactions in them, but firm in value when sought for, and, pending these proceedings, the old shares (600) will, of course, be alone dealt in.

Pendean Consols Mine is progressing most satisfactorily, and the shares are reaching a high figure. Next week 170 tons of copper ore, the produce of two months' working, will be sampled, which is said to be of a better quality than heretofore sold. The average price of the sales made in the quarter March to June, 1858, was 31. 6s. per ton. Wheel Adlam's shares have undergone a rather serious reduction in price, there being scarcely buyers at above 20s. The cause alleged is a report (apart from the management) adverse to the value of the mine, as far as at present developed, whilst it appears, even from the report in question, that the mine, owing to water or other impediments in the levels, was not in a condition to afford the means of a perfectly fair report, and in consequence another is promised by the management, which it is hoped will enable the public to estimate the property at its true value. Lady Bertha Mine is also retrograding, the shares leaving off at 19s., or thereabouts, and a lower price by some dealers anticipated. This slippery property has long stood in the estimation of the writer as not possessing any of the elements of investing stock, but it may have merits yet to be developed. Rosewarne United shares have experienced a perfectly sudden rise from 36l. to 46l., but leave off (as really might be expected) sellers. A retrospect of the former fluctuations, equally as sudden as the present, in the value of these shares may be taken with probably great advantage to holders and caution to buyers, since it does not appear to the unsatisfied that any *bona fide* cause exists for the present advance, and to realise at the advance is the best advice possible under the circumstances. North Minera have been rather largely dealt in, the demand having been for investment, and late prices are well sustained; more regular, or, if possible, regular, weekly reports in the Journal is, in the opinion of some shareholders, highly desirable. Dale shares appear to be fast going into obscurity, so far as dealings in them are concerned, although few offer on the market. The disappointment appears to arise from the non-cutting of the "Pipe vein," so long promised or expected. In the meantime another call of 2s. 6d. per share has been made, applicable (as it is observed) only to the new shares issued at 10s., and which section of the shares stand at 15s. paid, whilst their value as a marketable article is quite nominal. Great wealth may yet come out of this mine, unless the existence of the "Pipe vein" (of lead ore) is an illusion, which can scarcely be imagined, and as a speculation, at a low price, the 20s. paid-up shares should be bought. St. Day United—assumed to be first-rate mine—has had the management of the books and accounts transferred from Trelawny to No. 27, Austinfrans, London, and considering how generally unsatisfactory London shareholders a local financial management has proved in a number of mines, during their progressive course, this change, without disparagement to any individual hitherto engaged in it, must be considered "a step in the right direction" for the future welfare of the mine, which is rapidly developing for the resumption of dividends. The call lately made in the country of 5s. per share was confirmed by the London meeting. Wheel Edward and Sorridge Consols remain quiet, and still drooping in price, whilst Great Wheel Alfred had advanced to 35½ buyers.

Value of Tovy shares are in great demand, and at an advance—the late call of 1s. per share having benefited the property, although its effect was, *prima facie*, calculated to produce a contrary effect upon a mine in the Dividend List. They will probably advance considerably, the present price being preposterously low. Catherine and Jane Consols (a couple 37 tons of lead ore, the produce of three months' workings; and there being an advance of 20s. a ton realisable, this property may be considered as progressing satisfactorily, and will become more so should the returns of ore increase. About 500 tons of iron ore lately sold at 11s. 6d. per ton will also augment the credits of the mine. In 7146 shares the present price gives a large margin for profit to an investor, being only about 2000l. for a mine in full work, and as close as possible to paying costs. Kelly Bray shares, have also advanced in value to 2½ to 3%. The mine is in great favour and highly spoken of. Wheel Arthur does not improve, and the payment of calls in arrears early. Heretofore in considerable demand, but no sellers in the London market. Redmoor have been more enquired for, and should be classed as cheap shares at 4d. to 5s. Holmbush Mine is said to have improved during the week, and other safe shares to invest in at present rates may be mentioned. Round Hill, Wheel Sidney (greatly improved), West Trelawny, Wheel Crebor, North Roscar, Great Hewas, South Lady Bertha, Denham Bridge, and Great Wheel Martha—the three latter particularly recommended as speculations, at a price not often heard of for any property which has really attained the name of a mine. Rosewarne and Herland much enquired for, and business done at 9½.

The writer intimates, in addition to the fact as stated in his usual advertisement, that he has extended his business to other shares and stocks besides British Mines, and has made arrangements with a firm standing high on the Stock Exchange to facilitate operations in every description of stock there dealt in, without any charge for admission beyond the Stock Exchange rate. The Stock Exchange List of transactions up to three o'clock each day may be had of Mr. Crofts, on applications from the country.

From MR. LEELEMAN.—The mining market is very active for good mining shares—such as West Seaton, South Caradon, Providence, Margaret, Charlotte, East Trefusi, Trelawny Consols, North Dolcoath, Pendean, East Bassett, East Russell, South Cundarrow, Wheel Kitty (Leland), Mary Ann, Bell and Lanthorn, Trelawny, Kelly Bray, and St. Ives Consols; and stock cannot be obtained excepting at advanced prices. It is anticipated that the East Bassett lode will skirt East Trefusi, and in consequence of this rumour a great demand has sprung up for these shares; closing price, 41. to 51. Bell and Lanthorn progress favourably. Providence are likely to pay 4d. next time. Charlotte maintain their late rise; the mine continues to improve. East Bassett are firm, 180 to 182½, although reports were sent from Redmoor stating the "rich lode in the 80 and is cut out." Lord Bertha has sadly disappointed the shareholders, as will be seen by Capt. Richards's report, published in Mr. Murchison's Review of Dec. 31, 1858, page 80. This report is dated on the 7th inst., and confirmed by Capt. Metcalfe's report of the 19th. South Cundarrow is attracting attention in the neighbourhood of the mine; the call of 5s. will set the mine in first-rate order, now that the dead branches are lopped off. The locality is a good one. Trelawny Consols advance in price as the mine progresses. The great rise in tin has caused a great demand for these shares. We would draw attention to East Providence, selling at about 10s. to 12s. 6d.; and if 500 shares were taken off the market, I should not be surprised to see a rise of 500 per cent. in a month. Kelly Bray is making profits, and likely to increase them. Old Tolgus United is enveloped in mist, in consequence of a quarrel between two shareholders. This is too bad. However, the committee have taken a very proper course in calling a special meeting. East Bassett maintain their proud position in defiance of all opposition. Tolgus advanced to 19s. 6d., and left off sellers, at 15s. 6d. East Dore is looking well. North Bassett and North Croft are low, and worth looking after. The trend of law prevents West Bassett and South Frances rising; these are good mines, and are likely to continue so for many years. North Minera is looking better, and great confidence is entertained of success. Brynall is being developed with vigour; the prospects are cheering, and good results are expected. North Robert appear to be cheap at present prices. Cradock Moor will likely rival her neighbour in tin. Wheel Uly—what is the matter? One broker has instructions to buy and another to sell. Old Ding Dong will soon make a noise; the present price of shares 8d. to 10d. We have several good mines in view, and as soon as the dead branches are cut off shall have great pleasure in bringing them into notice.

## BEDPLATE IRON SLEEPER PERMANENT WAYS.

Public attention is again directed to the advantages to arise from developing the patent granted some short time since to Mr. Thomas Wright, for what is now well-known as the Bedplate Iron Sleeper Roadway, and upon which 100 miles per hour may be performed with perfect ease and safety. It is applicable to all descriptions of rail, and can be employed alike upon broad and narrow gauge lines; and it is said to be expressly adapted to sustain the highest speed and heaviest traffic with the greatest durability and lowest cost of maintenance, as it combines the advantages of the longitudinal and transverse systems, as well as the properties of the wooden with that of the iron road, dispensing with all loose parts. The strongest and by far the most desirable modification of the invention is the continuous bedplate roadway, the distinguishing feature of which is the employment of a single sleeper as a complete piece of roadway in itself, consisting of one compact and solid mass of iron, capable of sustaining a pair of rails without any longitudinal or transverse joints, being constructed similarly to the bed of a lathe. A slip of wood is interposed between the rail and sleeper, and also between the ends of the sleepers. By this invention the whole line forms one immovable mass, smooth and unyielding, resisting the oscillation of trains, and preventing all lateral and vertical motion whatever.

Perhaps the greatest recommendation, however, in favour of the new system is the extremely small number of separate pieces required for every mile of line laid, compared with existing systems. There are 440 longitudinal detached iron sleepers in a mile, and estimating the weight of each at 1 ton, the price at 5l. per ton, and including the fastening, would be 2445l. per mile single line, without the rails, which, notwithstanding this increased cost, is undoubtedly the cheapest for the increasingly heavy traffic of the railways of this country, and always retains an intrinsic value, while the ordinary wooden road, with all its mechanical defects and other drawbacks, is in a few years valueless. As a proof of this, it is asserted that "the ordinary wooden sleeper railway is composed of 19,842 separate loose pieces in a mile 'unfished,' but when fished is thereby increased to 26,000 loose pieces, while the bedplate iron solid sleeper system contains only 7000 pieces, being a reduction of 19,000 loose parts, as compared with the fished wooden railways, thereby reducing the wear, tear, and shaking loose of the various parts, which is a prolific source of the great expense of railway maintenance.

Where expense is an object, the difficulty is met by an economic application of the invention (the sleeper being in this instance designated the transverse iron solid sleeper) with the flat-bottomed rail applied. This modification is suited also to the ordinary bridge rail, and, whether employed upon narrow or broad gauge lines, stretches across the whole width of the way, without any transverse joints, supporting at once a pair of rails upon one thoroughly permanent sleeper in one piece, and securing alike the gauge of the line and the tilt of the rails, also the joints of the rails from lateral and vertical motion. This road is produced as cheaply as an ordinary wooden sleeper railway, and has the properties of the wooden in combination with those of the iron road, besides ensuring the greatest amount of efficiency in its construction, together with great economy, strength, and usefulness, as well as facility for repair. The several classes of bedplate sleepers are made of various weights, so that by a judicious choice they would be found equally valuable for our heaviest worked lines at home, and for the light tramroads which it is proposed to construct in the less commercial districts of India and the colonies.

## ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS.

The annual meeting was held on Tuesday at the Town Hall, Manchester. Mr. Wm. Fairbairn, C.E., F.R.S., president, occupied the chair; and amongst those present were Mr. Thomas Bazley, M.P.; Hugh Mason, the mayor of Ashton-under-Lyne; James McConnell, W. W. Platt, John Appleby, G. Peel, Wright Turner, and William Booth, Manchester; Edward Ashworth, and Charles Seaton, Bolton; E. A. Wright, Oldham; Richard Harst, Rochdale; J. B. Booth, Preston. The reports of the committee of management, and of Mr. E. B. Longridge, the late chief inspector, were read. "The number of boilers under inspection at different periods was—in 1856, 1301, the income being 12857. 1857, 1532, with an income of 15991; 1858, 1561, with an income of 16381. The revenue of the year was 17757. 3s. 6d.; and the balance remaining in the bank was 10511. against 10031. at the commencement of the year. On the whole, the committee regard the financial position of the association with greater confidence than hitherto. The ordinary services rendered by the officers had been—Visits by chief inspector, 513; quarterly visits by the sub-inspectors, 2580; thorough internal and external examinations, 235; annual indications of engines, 603. Special services: Examinations by sub-inspectors, 114; additional indications by sub-inspectors, 138; special indications by the same, 6. The committee regret that though provision was made for one thorough internal and external examination per annum of every boiler under their superintendence, yet only 235 such examinations have been made out of a total of 1561. Adding the 114 special examinations, the total was only 349. As regarded the incorporation, have deemed it expedient that the value supplied the boilers in various parts of the district should be analysed, and Dr. E. A. Smith was engaged in that object. The committee would again remind the members and the users of steam power generally, that this association was established for the purpose of preventing, by efficient and periodical inspection, the explosion of steam-boilers, and for promoting their economic use. The committee hope that they need not do more than urge upon all users of steam the desirability of a continuance of that support to this association, whereby it will be enabled, so far as careful examination and experienced and competent advice can contribute to that end, to prevent those frightful accidents to life and property to which reference has already been made. In conclusion, the committee refer to the retirement of Mr. Longridge, and the appointment of Mr. H. W. Harman, C.E., as chief inspector."

The CHAIRMAN, in moving the adoption of the report, congratulated the meeting upon the prosperity of the association. It was very desirable that all the members who had boilers should be careful to make provision for their inspection by the inspectors. It was also essential that regular indications of the engines should be taken, together with diagrams showing whether they were working economically or otherwise; for in this way a great saving of fuel may be effected. Another matter of importance was the incrustation in boilers. It had been found that much of the water used was impregnated with a sediment, and it was, therefore, necessary that the boilers should be periodically cleaned, either once a fortnight or once a month. The executive committee had engaged Mr. Angus Smith to analyse the waters in the neighbourhood, but his report would not be presented to the Association for two or three months. To ensure a thorough examination of boilers it was desirable that there should be special visits by the inspectors, at times suited to the convenience of the members. A question had been raised as to the extension of the limit of the society's operations. The present limit was 30 miles, but an offer had come from a greater distance, and he personally saw no objection to the extension of the limit to 50 miles, provided the additional revenue covered the expenses. At the same time, if the members considered it desirable, the committee would be glad to form of new and separate associations in those distant places. He believed that the operations of the society had resulted in the saving of a great number of lives and a large amount of property. He had recently investigated the causes of explosion from the collapse of fires, and had found that the strength of a fire was in inverse proportion to its length. A fire of 15 ft. in length would bear twice the pressure per square inch of one of 30 ft. He was also about to carry out some experiments with respect to surcharged and combined steam.

Mr. T. BAZLEY, M.P., seconded the resolution. He was not sorry to see that a rival institution had been called into existence, for if they were protecting the lives of their fellow-men, and increasing the love of science, there could not be too many agents in such an excellent work. At the same time, it was only fair to state that the members of this association had from the first been actuated by feelings of benevolence, combined with a desire to promote the advancement of science, and they had no pecuniary result in

view. With regard to the extension of the society's operations, he was of opinion that no limit should be fixed, but that each application should be decided by the executive committee or the officers.—The resolution was agreed to.

On the motion of Mr. Booth (Preston), seconded by Mr. George Peel, a vote of thanks was passed to the committee of management.

Mr. E. ASHWORTH, in moving the appointment of the new committee, mentioned that Messrs. Pease, of Darlington, had offered 541. 10s. per annum for the inspection of 50 boilers, and he thought their offer should be accepted.

Mr. HUGH MASON seconded the motion, and described the good results which had followed at his own works from the inspection by the society's officers.

The motion was carried; and the vacated chair having been taken by Mr. Bazley, M.P., a vote of thanks was passed to the Chairman; who, in replying, suggested that photographs should be taken of all the accidents to boilers; that a carefully prepared report by the chief inspector should be entered in a book kept for the purpose; and that a museum should be formed of everything connected with boilers and steam-engines.

## WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—H. C. VIEW, Paris: A new mode of obtaining atmospheric electricity, and terrestrial electricity, and its industrial applications, and in apparatus for the same.—J. LEES, W. HEAR, Ashton-under-Lyne: Machinery for punching square holes in the ends of rollers and other articles.—J. H. JOHNSON, Lincoln's Inn-fields, and Buchanan-street, Glasgow: Improved manufacturing copper tubes and pipes without joint or weld, either straight or curved, by depositing copper by a galvanic battery on and upon a core of lead or other fusible metal or material capable of being fused or melted by heat, or otherwise reduced and removed. The core may be solid or hollow, and when hollow may be allowed to remain in the copper tube, or may be removed by melting, or otherwise.—P. E. GUBERIN, Paris: Application of an apparatus to railway locomotives, wagons, and carriages, for the purpose of lessening the effect of concussion in the event of collision.—J. BROWN, Rotherham: Buffers, draw springs, and bearing springs.—J. B. MORGAN, Liverpool: Improvements in propelling navigable vessels.—L. G. HIGHAM, late of New York, United States, now of Edmund-place, London: Obtaining submarine electrical conduction.—J. BUCHANAN, Greenock: Oil cans or lubricating apparatus.—A. Y. NEWTON, Chancery-lane: Process of, and improved apparatus for, separating metals from their ores.—J. ARNOLD, Great Tower-street: Manufacture of bolts, rivets, and spikes.—J. H. JOHNSON, Lincoln's Inn-fields: Machinery and apparatus for boring and piercing rocks, applicable also to the dressing or working of stone, and as a power hammer generally.—C. F. VASSEROT, Strand: Chain and bucket pump.—L. A. NORMANBY, Judd-street, London: Process of distilling and clarifying resinous substances.—J. BIERNS, Kentish-town: A self-acting carriage wheel brake.—C. WILLIAM SIMMONS, Adelphi: Supports for electric telegraph line wires, and in tools or apparatus to be used in the construction of such supports, part of which improvements are applicable to the joining of pipes and other articles.

MANUFACTURE OF COPPER PIPES AND TUBES.—Mr. Brooman (for Messrs. Lichant and Egrot) provisionally specified an invention which consists in manufacturing copper tubes and pipes without joint or weld, either straight or curved, by depositing copper by a galvanic battery on and upon a core of lead or other fusible metal or material capable of being fused or melted by heat, or otherwise reduced and removed. The core may be solid or hollow, and when hollow may be allowed to remain in the copper tube, or may be removed by melting, or otherwise.

ARTIFICIAL FUEL.—Mr. Hy. Rollinson, Stepney, has recently obtained a patent, having reference to the manufacture of an improved fuel, for the general purposes for which fuel is employed, which may also be used for kindling or igniting fires, to be called bituminised fuel. The invention consists in employing a combination of the following vegetable and hydrocarbonaceous materials:—Coal, pitch, breeze with or without ashes, broken coke, or sawdust, to which may be added coal tar, Stockholm tar, Stockholm pitch, resin, or similar liquid or solid bodies capable of burning. These materials should be heated and moulded into suitable blocks, and submitted to pressure.

COAL BURNING LOCOMOTIVES.—Mr. G. Stieler, Manchester, provisionally specified some improvements, which consist in the peculiar arrangement of one or more water spaces, bridges, or transverse tubes in the fire-boxes of locomotive or other tubular boilers, whereby he is enabled to carry a series of fire-tiles of suitable form, through which the products of combustion are conducted; and he also introduces a number of hollow stays into different parts of the fire-box, and through these a supply of atmospheric air is conveyed to the before-named products of combustion, by which means, in conjunction with the fire-tiles, the whole of the gases become combined with the oxygen of the atmosphere in a superior manner, thereby producing more perfect combustion, which enables him to burn coal instead of coke, without causing a nuisance by masses of smoke issuing from the chimney.

BLACKLEAD COMPOSITION.—Mr. R. Hicks, Chatham-place, has patented an invention which consists in forming a composition of black schist, or a carburet of iron combined with other substances and plumbago of commerce, and with or without soda and lampblack, or of forming a composition of black schist and carburet of iron with or without soda and lampblack. He does not limit himself to exact proportions, but states that the following makes a very good composition:—Black schist, 8 parts; carburet of iron, 8 parts; plumbago of commerce, 8 parts; soda, 1 part; lampblack, 1 part. The whole to be ground, well mixed, and sifted.

LEVER SMOKE PREVENTING APPARATUS.—In the Yorkshire and Lancashire district a very ingenious contrivance, consisting of a series of weighted lever valves, has been extensively applied by the inventors, Messrs. Fennell and Sons, of Bradford, and appears to give the greatest satisfaction. The weights are adjusted so as to cause the valves to close when the fuel is exhausted, and no combustible gases are rated, after which the self-regulating force varies in proportion to the amount of burning fuel or combustible gases within the furnace, and the heated products arising therefrom. The greater the draft the more widely the valves open. The apparatus is compact and inexpensive, requires no attention on the part of the fireman, and may be applied to all descriptions of steam-boiler or other similar closed furnace.

## BOMBAY, BARODA, AND CENTRAL INDIA RAILWAY CO.

The meeting of this company was held on Tuesday, under the presidency of Lieut. Colonel P. T. French, who congratulated the proprietors on the prospects of the immediate opening of the first portion of their line. The section from Surat to Baroda, a distance of eighty miles, with the exception of the two bridges now in course of construction over the Taptee and Nerbudda rivers, would be completed and opened early in the next month. The authority of the Bombay Government had been received for taking continuous possession of the land for 32½ miles of the line, from Surat, southwards. Three subsequent sections, dated in November last, had given over the remainder of the land required within the Surat collectorate, by which they were placed in possession of 66 miles in the aggregate south of Surat, and the Government had further Tannah collectorate to the extent of their approved surveys, and also that steps should be taken to give possession of such other lands as may be required within the collectorate. So that the fear which had been entertained by many members of the Board of Control on that point was now fully and finally disposed of, and 100 miles will have been opened for traffic within very little more than two years, traversing a country as rich as it is populous, never having been plundered by foreign enemies, and one of the finest possible countries for a railway to intersect, the ruling gradient being almost a level, not exceeding 1 in 500—such a gradient as could not be found in this country for 40 consecutive miles. With regard to the conversion into stock of the capital of the company, this had been a source of great vexation to the directors. Counsel's opinion had been taken upon the point, which stated that they were precluded from carrying this proposition into execution; when another counsel's opinion was taken, which unhappily exactly agreed with the former. In consequence of these legal difficulties a bill will be introduced into Parliament in the approaching session, for the purpose of obtaining more extensive powers than the company now possess for the conversion of shares into stock, and the issue of capital. The shareholders were congratulated upon the auditors' report, than which nothing could be more favourable. In the construction of the line a vast amount of bridging was required. There have been very satisfactory testings of these bridges, which were interesting to the public to witness. By the permission of the Secretary of State of India, a state carriage will be presented to the Prince as a compliment for the many valuable services he has rendered. A very useful carriage for the benefit of invalids and the sick had also been sent out, which afforded every facility for their conveyance from the stations down to the Presidency of Bombay. The Board was now divided into the finance, the shipping, and the works committees, the Chairman of the board being *ex officio* the Chairman, from which arrangement great efficiency had resulted. One of the directors, Mr. Landman, had gone to Bombay, who with Mr. Ford would expedite in many ways all necessary requirements. During his absence his home duties were mutually discharged by his co-directors, as great good was expected to arise from his residence in India. The continuation of the line from the Nerbudda River down to Bombay was an important feature, on which hinges a great deal. Notwithstanding the conflicting opinions extant, there was every reason to believe that matters would be amicably arranged. The Government, before deciding, had ordered surveys to be made, so that it will be in possession of all the features of the case, and under such circumstances there was no doubt that the decision will be entirely in favour of the company. The directors are now at peace with "all foreign powers"—with the Bombay Government, and rejoiced in the smiles of the India House. The company had now the experience of six James Cosmo Melville, K.C.B., who has been for many years connected with other railway companies; and at the board the most perfect harmony prevailed.

The report, which was adopted, was of a very satisfactory character. An approach has now been made to a traffic return, and a prospect of a dividend at no distant day. In future it was agreed all dividend warrants should be crossed.

The advisability of possessing an independent terminus was urged by Capt. WARREN, who is one of the oldest directors of the South-Eastern Railway. He knew how much inconvenience arose from two railways working with the same terminus. As traffic increased difficulties arose. He looked at their prospective trade in cotton as being enormous, as the line would pass through the principal cotton districts of India—therefore, the greater necessity for a distinct terminus.

Great satisfaction was expressed at the conduct of Lord Stanley in his position in the Indian Council, from whom had been received the greatest courtesy.

The Chairman having been unanimously thanked for the lucid explanations he had given, the meeting dissolved.

RAILWAY CONTRACTS.—The North-Eastern Railway (York) require tenders for supplying 300 sets of wrought-iron wagon-wheels and axles.

The Great Indian Peninsula Railway Company require tenders for the construction of the works of the Nagpur branch, a distance of 262 miles, comprised in five contracts.

MANCHESTER AND MILFORD HAVEN RAILWAY.—We are gratified to find that this long-talked-of project has at last been fairly launched. On the 14th inst. the material guarantee of 33,000l. was lodged at the Accountant General's, having been provided, as we are informed, by Messrs. Davies and Savin, the enterprising contractors of the Llandoches and Newtown Railway, upon the faith of the report receiving sufficient support from the public to ensure success. The capital is 420,000l., with borrowing powers of 120,000l., and the London and North-Western have granted a guarantee traffic arrangement which will secure 4½ per cent. on the share capital, and 5 per cent. on debentures. A most efficient board has been constituted in London, of which Mr. G. H. Whalley, chairman of the Llandoches Company, has accepted the chairmanship.—*Shrewsbury Journal*.

CRYSTAL PALACE.—The result of the poll of shareholders in the company is as follows:—92,785 votes in favour of admitting shareholders to the Palace and grounds on Sundays, against 75,764 votes on the other side.

THAMES TUNNEL COMPANY.—Receipts for the week ending Jan. 15, 807. 5s. 7d.; number of passengers, 19,267.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending January 16 amounted to 10,541. 3s. 9d.







## GEOLOGY AND MINERALOGY,

UNIVERSITY COLLEGE, LONDON.  
Prof. J. MORRIS, F.G.S., will COMMENCE his COURSE on the above subjects on TUESDAY, February 1, at a quarter past Four, P.M. The lectures will be on Tuesday and Thursday, at the same hour. During the course field excursions will be given. Payment, including college fee, £2 2s. 6d.  
THOMAS L. DONALDSON, M.B.A., Ph.D., Dean of the Faculty of Arts and Laws, CHAS. C. ATKINSON, Secretary to the Council.

## GEOLOGY.—KING'S COLLEGE, LONDON.

Prof. TENNANT, F.G.S., will COMMENCE a COURSE of LECTURES on GEOLOGY on FRIDAY morning, January 28, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday, at the same hour. Fee, £2 12s. 6d.  
R. W. JELF, D.D., Principal.

## TO COLLIERY PROPRIETORS AND OTHERS.—

TO BE SOLD, BY PRIVATE CONTRACT, a valuable and powerful DOUBLE LIFT CONDENSING STEAM ENGINE, of 40 horse power. Also, 140 yards of 13 in. iron pump pipes, with pump rods, stays, and other necessary gear for pumping water from mines. And also TWO 30 horse power BOILERS, with gearing and feed pipes complete. The above engines may be seen at work at the Townhouse Colliery, Marsden, Lancashire, at any time up to the 22nd February. For further particulars, apply to Mr. J. WILKINS, manager of the above colliery; or at the office of Mr. GEORGE SPENCE, solicitor, Keighley.

## TO MINE AND COAL PROPRIETORS, ENGINEERS, AND

OTHERS.—TO BE SOLD, BY PRIVATE CONTRACT, a 30 in. cylinder CONDENSING ENGINE, of equal beam, 7 ft. stroke, with double valves and seats, parallel motion, hand nozzle and catenary gear. The beam about 5 tons. This engine is situated at the Ormside Mine, about two miles from the town of Holywell, nearly new, in excellent condition, of the most approved and latest construction, and manufactured by that eminent firm, Messrs. John Taylor and Sons, Rhyl-y-Mwyn Foundry, Rhyl. For price and further particulars, apply to Mr. D. JONES, timber merchant, Rhyl, near Holywell; or Mr. BELL, auctioneer and appraiser, Greyhound Inn, West Street, Holywell, Flintshire.

## FOR SALE, a 24 in. WHIM HORIZONTAL ENGINE, with a

10 tons boiler, nearly new, in excellent condition, and drawing machine attached. This engine is very superior in make and condition, parties requiring one will do well to examine it.—Apply to Mr. C. WATSON, 21, Southernhay, Exeter.

## STEAM ENGINE FOR SALE.—A 24 inch ROTARY

CONDENSING HORIZONTAL STEAM ENGINE FOR SALE, 6 ft. stroke in cylinder, heavy fly-wheel, drawing machine attached, and connection for pumping, with 9 ton Cornish boiler, the whole in good condition.—Particulars may be had by applying to Messrs. NICHOLLS, WILLIAMS, and Co., Engineers, Tavistock.

Messrs. NICHOLLS, WILLIAMS, and Co. have always a good supply of SECOND-HAND IRON MATERIALS FOR SALE. Orders executed for new machinery and materials at the shortest notice, and of best quality. Machinery sent to all parts of the world, and engineers to erect it.

## STEAM ENGINES.—TO BE SOLD CHEAP, a superior

NEW HIGH-PRESSURE HORIZONTAL ENGINE, of 14 horse power, 14 in. cylinder, and 2 ft. stroke. And ONE of 30 horse power, 20 in. cylinder, and 3 ft. stroke. Apply to Messrs. PAGE and CAMERON, auctioneers and valuers, 64, Old Broad Street, London, E.C., and St. Alban's.

## OVERLAND ROUTE.—WEEKLY COMMUNICATION BY

STEAM TO INDIA, &c., via EGYPT.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS for the MEDITERRANEAN, ADEN, CEYLON, MADRAS, CALCUTTA, the STRAITS, CHINA, and HULL, by their steamers leaving Southampton on the 4th and 20th of every month; for the MEDITERRANEAN, EGYPT, ADEN, and BOMBAY, by their packets leaving Southampton about the 11th and 27th of the month.

For further particulars, apply at the company's offices, No. 122, Leadenhall Street, and Oriental-place, Southampton.

## STEAM TO AUSTRALIA UNDER SIXTY DAYS.

PASSAGE MONEY £14 AND UPWARDS.

To the consignments of Bright Brothers and Co., Melbourne.

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EX-ROYAL MAIL PACKETS AND EAGLE LINE OF PACKETS.

In conjunction with the celebrated auxiliary steam clippers GREAT BRITAIN and ROYAL CHARTER.

Appointed to sail punctually from LIVERPOOL on the 5th and 15th of each month.

The above, in addition to being the only line with steamers out of Liverpool, is composed of the LARGEST, FINEST, and FASTEST MERCHANT SHIPS in the WORLD.

Ship. Register. Burthen. Captain. Date.

MARCO POLO..... 1825..... 3500..... JOHNSON..... 5th February.

POCAHONTAS..... 1139..... 3000..... WOODBRIDGE..... 15th February.

BRITISH TRIDENT..... 1555..... 3500..... O'NEILL..... 5th March.

GREAT BRITAIN..... OCEAN CHIEF.....

ROYAL CHARTER..... LIGHTNING QUEEN.....

CHAMPION OF THE SEAS..... BRITISH TRIDENT.....

DONALD M'KAY..... GIPSEY BRIDE.....

MARCO POLO..... GREAT TASMANIA.....

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The above celebrated steam and sailing clipper ships, forming the only lines honoured

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will continue to sail regularly between Liverpool and Melbourne, thus affording to passengers and shippers the most unrivalled advantages. The commanders are men of experience, and noted for their kindness and attention to passengers.

The cabin accommodation is most superior, the saloons being elegantly furnished with every requisite to ensure comfort to passengers, and are supplied with beds, bedding, &c.

Parties wishing to bring their friends home from Australia, can obtain tickets for these ships leaving Australia every month.

Apply to GIBBS, BRIDGES, and Co., merchants, or to JAMES BAINES and Co., Tower-buildings, Liverpool; or to T. M. MACKAY and Co., 2, Moorgate-street, London, E.C.

## NOTICE.—The White Star Line, comprising the LARGEST, FINEST, and

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EX-ROYAL MAIL PACKETS.

SAILING FROM

LIVERPOOL TO MELBOURNE, on the 1st and 20th of every month, and

from MELBOURNE TO LIVERPOOL on the 1st of every month.

Passengers forwarded by steamers to ALL PARTS OF AUSTRALIA, TASMANIA, &c., at through rates.

Ship. Register. Burthen. Captain. Date.

RED JACKET..... M. H. O'HALLORAN..... WHITE STAR..... T. C. KEER.

PRINCE OF WALES..... M. A. BROWN..... STAR OF THE EAST..... GAGNE.

HERMAD..... JAMES WHITE..... SHALIMAR..... J. R. BROWN.

BECHWORTH..... THOMAS FRANK..... ARABIAN..... M. GAGNE.

CYCLONE..... GEORGE KEER..... SIROCCO..... J. FLOOD.

And other celebrated clippers.

Ship. Register. Burthen. Captain. Date.

BLUE JACKET..... 1074..... 3500..... J. CLARKE..... February 1.

ARABIAN..... 1063..... 3500..... M. GAGNE..... February 20.

SCOTTISH CHIEF..... 1053..... 3500..... HUGHES..... March 1.

Passengers embark on the 31st January and 18th February.

The Blue Jacket is a new clipper yacht of the most exquisite model and symmetry,

and is a sister ship to the celebrated clippers *Genii* and *Sir W. F. Williams*, which made her

last passage home from Australia in 67 days; she is expected to prove herself one of the

fastest clippers in the world. Her saloon is a chaste and elegant apartment, fitted up

with great splendour, and replete with every luxury and comfort. A piano, library,

linen, bedding, chess boards, &c., are provided for saloon passengers, for whose use a cow

is also carried.

The *Arabian* is well known in the trade as having made the voyage round the world

in 6 months and 19 days, her outward and homeward passages being 75 and 79 days

respectively. Her last passage home from Calcutta was made in 82 days, up to that time

the fastest of the season.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-

street, Liverpool; or to GRINDLAY and CO., 63, Cornhill, London; or to SEYMOUR, FRANK, &c., 116, Fenchurch-street, London.

WHITE STAR LINE OF BRITISH AND AUSTRALIAN

EX-ROYAL MAIL PACKETS.

SAILING BETWEEN

LIVERPOOL AND MELBOURNE, on the 1st and 20th of every month,

And forwarding passengers by steamers at through rates to

ALL PARTS OF AUSTRALIA.

Packet of the 1st of February, the beautiful new clipper ship, *Blue Jacket*, Capt. Clarke,

12 tons register, 3500 tons burthen.

This elegant clipper is sister ship to the celebrated clippers *Moorecroft*, *Genii*, and

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AUSTRALIA AND THE NEW GOLD DIGGINGS.—

THROUGH PASSAGE TO FITZROY RIVER AND MORETON

BAY, BY THE MERSEY LINE OF PACKETS, SAILING FROM

LIVERPOOL TO MELBOURNE, on the 25th of every month. The mag-

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to JAMES THOMSON and Co., 29, Water-street, Liverpool; or to their agent, ANDREW

KEAS, 25, Leadenhall-street, London, E.C.

UNITED STATES OF AMERICA.—DUPEE, BECK, and

SAYLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and

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SHARES, give particular attention to the MINING COMPANIES OF LAKE

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[DUPEE, BECK, and SAYLES refer to the Editor of the Mining Journal.]

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MIDLAND WORKS, BIRMINGHAM.

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IN STOCK—FOR SALE OR HIRE.

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MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND

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LOCOMOTIVE TYRE BARS OF EVERY DESCRIPTION, FOR ENGINES,

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COVERS, CART AND WAGON COVERS, OIL CLOTH, STACK COVERS,

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For LICENSES to USE the above process, apply to ROBERT LONGDON, Jun., 63, King-

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IRON.—THE TOUGHENED CAST-IRON, for GIRDERS, SHAFTINGS,

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RAILS OF (OR SURFACED WITH) PATENT HARDENED IRON, CAN BE

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CWM CELIN AND BLAINA. DUNDYVAN.

HAWES, CRAWHAY, AND CO. MONELAND.

For durability, these rails have never been surpassed. They wear out several sets

of ordinary rails, and do not laminate.

Full information, and terms for use of patent right, can be obtained of Messrs. CONNELL

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Rails.

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MANUFACTURERS OF HORIZONTAL HIGH-PRESSURE STEAM EN-

GINES, from 10 to 200-horse power; the larger description of engines mounted with their

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FIRST CLASS STEAM HAMMERS, from 10 cwt. to 7 tons, suitable for jobbing

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Govan Bar Ironworks, Glasgow.

JOHN CONDIE.

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FOR THE MANUFACTURE OF STEAM BOILERS, IRON BRIDGES, TANKS,

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## STEAM PUMPS, by JOHN CAMERON, SINGLE and DOUBLE

ACTION, from 2½ to 12 inches, kept in stock. They are extensively used in the

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## TO PREVENT ACCIDENTS BY WINDING OVER THE HEAD

GEAR, USE THE PATENT SELF-ACTING STEAM BREAK, which at every

lift from the mine shuts off the steam from the winding engine and applies the break;

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MACHINES, TO DIMINISH THE LOSS FROM BREAKAGE IN LOADING

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ARTHUR AND JAMES HIGG, PATENTERS AND MAKERS,

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SEWERS, GAS WORKS, GAS FITTERS, HOLDS OF SHIPS, and all purposes

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ROBINSON'S AND OGDEN'S PATENT SELF-LOCKING LAMP, possessing the fol-

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MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL

SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Mer-

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SAFETY FUSE has now a thread wrought into its centre, which, being patent right, in-

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BLASTING CARTRIDGES, WARRANTED NOT TO MISS FIRE. Adapted for all

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200	Barnfield (tin), St. Just	20 10 0	6	7 1/2	23 0 0	0 0 0	Nov. 1858
200	Barnfield (tin), St. Just	20 10 0	6	7 1/2	23 0 0	0 0 0	Nov. 1858
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1058	Cradock Moor (cop.), St. Cleer	8 0 0	30	29	3 9 0	0 0 0	Jan. 1859
867	Corn Erbin (lead), Cardiganshire	7 10 0	14	14	0 19 0	0 10 0	Nov. 1858
128	Croftwith (lead), Cardiganshire	60 0 0	300	300	145 0 0	0 0 0	Jan. 1859
4078	Devon and Cornwall (cop.)	4 6 0	12	12	0 7 6	0 2 6	April 1859
1024	Devon Gr. Con. (cop.), Tavistock* [S.E.]	1 0 0	470	465	446 0 0	0 7 0	Jan. 1859
358	Dolcoath (cop.), Camborne	128 16 0	300	300	492 10 0	0 0 0	Dec. 1858
300	East Daren (lead), Cardiganshire	32 0 0	110	110	54 0 0	0 0 0	Dec. 1858
2048	East Palmouth (cop.), Gwennap	2 0 0	3 1/2	3 1/2	0 7 6	0 2 6	Jan. 1859
128	East Pool (tin), Pool, Illogan	24 5 0	175	175	305 0 0	0 2 0	Aug. 1858
5700	Exmouth (silver-lead), Christow	4 14 0	8	8	3 15 0	0 2 6	April 1859
1400	Evans Mining Co. (lead), Derbyshire	5 0 0	38	38	18 13 4	0 0 0	Aug. 1858
2500	Foxdale, Isle of Man, Limited (lead)	2 0 0	42	42	25 8 0	0 0 0	Nov. 1858
480	Graham and St. Anby (cop.) [S.E.]	54 15 0	95	90	18 10 0	0 10 0	Jan. 1859
6000	Great South Toluca (S.E.) Redruth	0 14 6	13	12 1/2	3 7 6	0 10 0	Dec. 1858
1024	Herodfoot (cop.), near Liskeard	8 10 0	8	8 1/2	4 7 6	0 12 6	Nov. 1858
100	Levant (cop.), St. Just	2 10 0	105	105	1076 0 0	0 0 0	Nov. 1858
400	Lisburne (lead), Cardiganshire, Wales	18 15 0	100	100	317 10 0	0 2 0	Dec. 1858
5000	Mendip Hills (lead), Somerset	3 15 0	134	134	1 13 6	0 6 0	May 1858
1500	Minera Mining Co., Ltd. (id.), Wrexham	25 0 0	125	125	35 12 6	0 2 0	Nov. 1858
20000	Minning Co. of Ireland (cop., lead, coal)	7 0 0	12 1/2	12 1/2	14 3 2	0 9 10	Jan. 1859
470	Newtown Mining Co., Co. Down	60 0 0	30	30	55 0 0	0 1 0	July 1858
6000	N. Wh. Basset (cop., tin), Illogan* [S.E.]	nil	7 1/2	7 1/2	14 12 0	0 5 0	Aug. 1858
6400	Par Consols (cop.), St. Agnes* [S.E.]	1 2 6	16 1/2	16 1/2	32 15 0	0 10 0	Oct. 1858
200	Phoenix (cop.), Linkingmore	100 0 0	410	410	294 10 0	0 25 0	Nov. 1858
1772	Pollero (tin), St. Agnes (Preston)	—	—	—	1 7 0	0 7 0	Sept. 1858
600	Providence (tin), Uny Lelant* [S.E.]	20 13 2	67	67 1/2	79 4 6	0 3 0	Nov. 1858
2500	Rhosydwyl and Bacheland (lead)	11 5 0	12	12	0 16 0	0 3 0	July 1858
15000	Ruadarn Colliery Company, Limited	0 5 0	34	34	0 1 10 0	0 1 0	Aug. 1858
250	South Canon (cop.), St. Cleer* [S.E.]	2 10 0	490	410	846 0 0	0 2 0	Nov. 1858
250	South Canon (cop.), St. Cleer* [S.E.]	2 10 0	490	410	846 0 0	0 2 0	Nov. 1858
512	South Toluca (cop.), Redruth, Cornwall	8 0 0	80	75	79 10 0	0 2 0	Nov. 1858
490	South Whel Franch, Illogan* [S.E.]	18 15 0	90	80	315 5 0	0 5 0	Jan. 1859
476	St. Ives Consols (tin), St. Ives	16 0 0	55	60	920 0 0	0 2 0	Nov. 1858
6000	Tincoff (cop., tin), Pool, Illogan [S.E.]	9 0 0	3 1/2	3 1/2	8 18 6	0 5 0	Sept. 1858
512	Wendron Consols (tin), Wendron	23 7 8	42	42	4 0 0	0 1 0	Dec. 1858
6000	West Basset (cop.), Illogan* [S.E.]	1 10 0	23	20	15 3 0	0 9 0	Nov. 1858
250	West Canon (cop.), Liskeard [S.E.]	20 0 0	140	135	287 5 0	0 2 0	May 1858
6400	West Forey Consols (tin and copper)	7 10 0	6	6	2 16 0	0 6 0	Nov. 1858
400	West Whel Seton (cop.), Camborne	38 10 0	325	330	146 0 0	0 7 0	Dec. 1858
240	Whel Bass (tin), St. Just	15 0 0	18	18	3 0 0	0 10 0	Nov. 1858
512	Whel Basset (cop.), Illogan* [S.E.]	5 9 6	220	230	507 10 0	0 6 0	Dec. 1858
250	Whel Buller (cop.), Redruth* [S.E.]	5 0 0	130	135	898 0 0	0 3 0	Jan. 1859
128	Whel Friendship (cop.), Devon	50 0 0	90	90	2385 10 0	0 10 0	Feb. 1858
448	Wh. Margaret (tin), Uny Lelant* [S.E.]	19 15 0	67 1/2	68	93 10 0	0 3 0	Nov. 1858
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	49 1/2	48	40 17 6	0 2 0	Dec. 1858
80	Whel Oriel, St. Just, Cornwall	70 0 0	800	800	225 15 0	0 5 0	Aug. 1858
1040	Wh. Trevelyan (id.), Liskeard [S.E.]	4 10 0	31	31	2 16 0	0 4 0	Oct. 1858
5000	Wicklow (cop.), Wicklow	5 0 0	40	42	31 15 6	0 10 0	Jan. 1859

## MINES WITH DIVIDENDS IN ABEYANCE.

1624	Balieswidden (tin), St. Just	11 5 0	5	5	12 5 0	0 5 0	Jan. 1859
1200	Brightside & Froggatt Grove, Derbyshire	3 0 0	3 1/2	3 1/2	3 0 0	0 3 0	April 1858
100	Brynfrodd (lead), Flintshire	5 0 0	50	50	13 0 0	0 5 0	Nov. 1858
1000	Bryntal, Llanidloes, Montgomeryshire	5 0 0	11	10 1/2	0 5 0	0 5 0	July 1858
300	Budnick Consols (tin), Parnan	2 6 0	15	15	0 10 0	0 10 0	Mar. 1857
6000	Bwch (silver-lead), Cardiganshire	3 6 0	1 1/2	1 1/2	0 2 6	0 2 6	Aug. 1858
4096	Calstock Consols (copper)	5 0 0	4 1/2	4 1/2	0 2 6	0 2 6	Dec. 1857
2048	Carnyorth (tin), St. Just	4 15 0	4 1/2	4 1/2	0 15 0	0 3 0	June 1858
5000	Collaume (copper), Llanon	5 0 0	13	13	2 5 0	0 8 0	Dec. 1857
250	Condurow (cop., tin), Camborne	20 0 0	90	90	85 0 0	0 2 0	June 1858
280	Derwent Mines (all-lead), Durham	300 0 0	150	150	122 0 0	0 10 0	June 1857
672	Ding Bore (tin), Gwent	35 0 0	8 1/2	8 1/2	0 13 6	0 2 0	Sept. 1857
1200	Drake Walls (tin, copper), Calstock	2 1 0	2 1/2	1 1/2	0 13 6	0 2 0	Sept. 1857
1024	East Whel Margaret (tin, copper)	7 17 6	2 1/2	1 1/2	0 5 0	0 5 0	Jan. 1854
4940	Fowey Consols (copper), Tywardreath	4 0 0	3 1/2	3 1/2	41 4 3	0 6 0	Feb. 1858
2000	Goginan (silver-lead), Cardiganshire	12 5 0	2 1/2	2 1/2	0 1 8	0 3 0	Sept. 1858
1024	Gonnamene (copper), St. Cleer	14 5 0	9	6 7	0 7 6	0 7 6	Dec. 1857
26066	Gr. Wh. Vor (tin, cop.), Helston [S.E.]	8 17 6	3 1/2	3 1/2	0 5 0	0 5 0	Oct. 1858
119	Great Work (tin), Gernone	100 0 0	110	110	221 10 0	0 7 0	Feb. 1857
6000	Hiltington (tin), Gwennap	15 0 0	2 1/2	2 1/2	4 2 6	0 5 0	Jan. 1857
2000	Holyford (copper), near Tipperary	11 0 0	8 1/2	8 1/2	1420 0 0	0 50 0	June 1857
90	Laxey Mining Company, Isle of Man	100 0 0	1000	1000	0 10 0	0 10 0	Dec. 1858
5000	Lewis Mines (tin, copper), St. Erth	6 9 11	2 1/2	2 1/2	0 5 6	0 3 0	Sept. 1858
8000	Marke Valley (copper), Caradon	4 10 6	2 1/2	2 1/2	1 11 0	0 2 6	June 1858
5000	Merilyn (lead), Flint	3 4 6	3	3	0 1 6	0 1 6	April 1858
5000	Nantons & Penrhyn, Ltd. (2 1/2 sha.)	2 5 0	1 1/2	1 1/2	324 0 0	0 2 0	Dec. 1854
200	North Pool (copper, tin), Pool	40 15 0	5 1/2	5 1/2	750 0 0	0 4 0	Sept. 1857
700	North Roskear (copper), Camborne	13 0 0	22	20	32 10 0	0 1 0	June 1858
512	Rosewarne United (cop.), Gwennap	15 0 0	39	40	0 10 0	0 2 6	July 1857
12000	Sordridge Con. (cop.), Whitchurch [S.E.]	0 6 0	3 1/2	3 1/2	60 0 0	0 20 0	June 1858
128	South Crinias (copper), St. Austell	19 0 0	285	285	8 8 6	0 2 6	Dec. 1858
74	Spearne Con. (tin), St. Just, Cornwall	18 0 0	3	3	4 5 0	0 10 0	June 1858
280	Spearne Moor (copper), St. Just	23 7 8	15	15	0 17 6	0 7 3	April 1858
970	St. Aubyn and Grylls (cop., tin), Breage	6 8 4	2 1/2	2 1/2	0 3 6	0 1 0	Feb. 1858
20000	St. Day United (tin and copper)	2 5 0	3 1/2	3 1/2	4 13 6	0 2 6	Feb. 1858
9000	Tamar Con. (id.), Beccleston [S.E.]	4 10 0	2 1/2	2 1/2	1 15 0	0 1 0	Feb. 1858
572	Trevelyan Consols (tin), St. Ives	11 10 0	6	12	40 13 6	0 2 0	April 1857
120	Trevelyan (tin), Gwennap	15 0 0	15	15	12 0 0	0 3 0	April 1857
4096	Trevelyan (tin), Menheniot, Cornwall	2 10 0	3 1/2	3 1/2	55 0 0	0 5 0	Dec. 1854
100	Trumpet Consols (tin), near Helston	95 0 0	95	95	61 5 0	0 2 0	Feb. 1858
400	United Mines (copper), Gwennap	40 0 0	140	140	0 5 0	0 1 0	July 1858
20000	Valley of Towry (lead), Carnarvon [S.E.]	0 13 6	12 1/2	11 1/2	22 0 0	0 2 0	July 1857
512	West Damsel (copper), Gwennap	12 17 0	115	115	23 1 9	0 10 0	April 1857
1024	West Providence (tin), St. Erth	2 19 1	1 1/2	1 1/2	1 6 0	0 10 0	Oct. 1858
6140	Whel Arthur (copper), Calstock	5 3 4	20	20	42 0 0	0 10 0	Sept. 1857
1024	Whel Charlotte, Penryn	5 3 4	20	20	42 0 0	0 10 0	Sept. 1857
4996	Whel Edward (cop.), Calstock [S.E.]	5 15 0	2 1/2	2 1/2	8 10 0	0 10 0	Oct. 1857
512	Whel Jane (silver-lead), Ken	3 10 0	2 1/2	2 1/2	0 6 0	0 6 0	Mar. 1857
5000	Whel Kitty (tin), St. Agnes	4 10 0	4 1/2	4 1/2	0 6 0	0 1 0	Sept. 1857
1024	Whel Kitty (tin), Uny Lelant* [S.E.]	1 7 2	8 1/2	8 1/2	248 5 10	0 5 0	Mar. 1858
430	Whel Level (tin), Wendron	33 0 0	7	7	40 10 0	0 3 0	Aug. 1858
100	Whel Mary (tin), Lelant	36 3 0	230	25	286 10 0	0 2 0	Oct. 1857
198	Whel Seton (tin, copper), Camborne	107 0 0	130	130	10 2 6	0 7 6	Jan. 1858
1024	Whel Trevelyan (tin, cop.), Gwennap	12 6 0	2 1/2	2 1/2	2 12 6	0 2 6	Dec. 1857
4096	Whel Wrey (lead), St. Ives	1 14 0	2 1/2	2 1/2	0 2 6	0 2 6	Dec. 1857

\* Dividends paid every two months. † Dividends paid every three months.

## FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0	140	140	210 0 0	0 5 0	Dec. 1858
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	38	40	87 12 0	0 10 0	Aug. 1858
10000	Copago Mining Company, Chili [S.E.]	16 0 0	12	10 1/2	5 15 0	0 10 0	Mar. 1858
70000	English and Australian [S.E.]	5 0 0	1 1/2	1 1/2	0 10 0	0 2 6	Sept. 1858
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	30 0 0	20	20	12 10 0	0 6 0	Jan. 1858
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0	8 1/2	7 1/2	6 9 0	0 5 0	Jan. 1859
10000	Lustanian (id.), Portugal [S.E.]	1 15 0	1 1/2	1 1/2	0 8 0	0 2 6	June 1858
103815	Marquette and New Granada [S.E.]	1 0 0	1	1	1 1 0	0 1 0	Jan. 1859
100000	Port Phillip (lead), Clunes [S.E.]	1 0 0	1	1	0 1 0	0 1 0	Jan. 1859

## FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Altene & Quannan (tin), Norway	16 10 0	3	3	4 5 0	0 15 0	Nov. 1853
15000	East Indian Coal, Calcutta [L.]	10 0 0	10	10	7 1/2	per cent.	Yearly.
10000	Pontgibaud (sil-lead), France [S.E.]	20 0 0	5 1/2	4 1/2	1 0 0	0 1 0	June 1858
7000	Royal Santiago (copper), Cuba [S.E.]	16 15 0	1 1/2	1 1/2	33 0 0	0 5 0	Jan. 1848
11000	St. John del Rey [L.] Brazil [S.E.]	15 0 0	12	11 1/2	35 7 6	0 1 0	June 1857
43174	Unit. Mexican (sil), Mexico [S.E.]	25 0 0	3	2 1/2	1 16 6	0 4 0	Feb. 1853

## NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Nom.	Pr.	Bus. done.	Last Call.
20000	Acadian Charcoal Iron, Nova Scotia [L.]	8 10 0	6	6	—	Nov. 1858
20000	Australian (copper) [S.E.]	7 5 0	—	—	—	—
75000	Bad Accord, South Australia (copper) [L.] [S.E.]	0 10 0	—	3	3	3
10000	Brazilian Imperial [S.E.]	27 5 0	2	—	1	—
10000	Brazilian Land and Mining [L.] [S.E.]	5 0 0	2	—	1	3
6000	Central American (silver), Atlatoque [L.]	7 0 0	—	2	—	—
6000	Clarendon Consols (copper), Jamaica [S.E.]	0 12 6	3	—	—	—
50046	Cologne Mining Company (lead), Rhenish Prussia	1 4 0	—	3	—	—
10000	Copapo Smelting [L.], Chili	10 0 0	—	13	—	—
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	3	3	—
20000	Ellerslie and Rardowie, Jamaica	0 17 0	—	1	—	—
8000	English and Canadian Mining Company Limited, Quebec	3 15 0	—	—	—	—
25300	Fortuna (lead), Spain [S.E.]	2 0 0	—	1	1	—
10000	Great Barrier Land, Mining, &c., New Zealand	1 10 0	—	1	—	—
2000	Great Silver Lead and Copper Comp. [L.], Jamaica	25 0 0	—	—	—	—
2000	Kingsplatz Mining Association, Germ.	2 0 0	1	—	—	—
80000	Mount Vernon (coal), Virginia	1 0 0	—	3	—	—
60000	New Granada (gold) [S.E.]	1 0 0	—	3	3	—
10050	New Grand Duchy of Baden (silver-lead), near Freiburg	0 15 0	—	3	—	—
40000	Newfoundland Mining Association [L.]	0 2 0	—	3	—	—
60000	North Rhine Copper of South Australia, Limited [S.E.]	0 10 0	—	1	—	—
100000	Nouveau Monde (copper)	1 0 0	—	3	—	—
50000	Quartz Reduction [L.]	1 0 0	—	3	—	—
6000	Rossie and Canada (lead)	9 0 0	—	—	—	—
75000	South of Europe Mining Co. [L.]	2 0 0	—	—	—	—
5000	Strathgully (copper) [L.]	1 0 0	—	—	—	—
2000	Tark's Head (copper), New Zealand	0 10 0	—	5	—	—
25000	Victor Emanuel Val d'Osola, Piedmont [L.]	1 0 0	—	1	—	—
20000	Wellington Copper Mine Company, West Canada, Limited	1 0 0	1	—	—	—
1000	Western Africa Malachite	95 0 0	—	100	—	—
25425	Whistl Jamaica (copper)	1 0 0	—	100	—	—
75000	Wildberg (silver-lead, copper), Prussia	2 0 0	—	3	—	—
30000	Working (copper), South Australia [L.]	0 14 0	—	60	70	—